LONDON JOURNAL OF MEDICINE,

A MONTHLY

Record of the Medical Sciences.

MAY 1851.—No. XXIX.

ORIGINAL COMMUNICATIONS.

ON IRRITABLE UTERUS.

By F. W. MACKENZIE, M.D., Physician to the Paddington Free Dispensary for the Diseases of Women and Children, Fellow of University College, etc.

A PAINFUL condition of the uterus, when not occasioned by displacement, inflammation, or any appreciable organic disease, constitutes the *hysteralgia* of some authors, and the *irritable uterus* of Dr. Gooch. It is met with in practice in various degrees of intensity, from slight uneasiness to a disease characterized by the most excruciating suffering. In its severest forms it is comparatively seldom met with; but, otherwise, it cannot be regarded as an unusual disease. Although it would essentially appear to consist in a mere lesion of innervation, and to be a very simple and remediable disorder, it is often found to be the reverse; and in some instances has baffled the resources and the ingenuity of the most experienced physicians. I propose, in the present communication, to draw attention to some facts which have come under my observation in relation to this disease, and to submit such inferences as appear to me to be deducible from them.

The slighter forms of this malady are characterized by pain in the uterine region, increased by standing or walking, and somewhat relieved by lying down. The pain extends, or rather radiates from the uterus to the groins, hips, thighs, and loins. A sensation of bearing down of the womb is often felt; there is frequently leucorrhœa and sometimes dysmenorrhœa. On a digital examination, the uterus is found to be extremely sensitive to the touch, but it is neither displaced, nor perceptibly diseased. The constitutional derangement attending this uneasiness is seldom of a febrile character; on the contrary, the general health is for the most part depressed, the circulation is languid, the pulse feeble, and the condition of the nervous system is that of weakness and irritability. The digestive organs, so far as I have observed, are seldom unaffected; they are generally in an irritable and disordered condition, and their secretions are either faulty or deficient. On inquiry into the antecedent circumstances of the patient, it

will often be found that she has suffered from severe mental affliction, trouble, or uneasiness, or has experienced some sudden fright or emotion, or else that she has undergone physical privation or fatigue; and that, as a consequence of these, spinal irritation and anæmia, in various degrees, have resulted. This latter condition is an almost constant concomitant, as well as antecedent of the malady; and, judging from the history of the cases which I have collected, would appear to be its principal predisposing cause.

The more severe form of this disease has been very graphically described by Dr. Gooch. He remarks that a patient, suffering from irritable uterus, complains of pain in the lowest part of the abdomen along the brim of the pelvis, and often also in the loins. The pain is worse when she is up and taking exercise, and less when she is at rest in the horizontal posture. If the uterus is examined, it is found to be exquisitely tender. As soon as the finger reaches, and is pressed against, the uterus, it gives exquisite pain; this tenderness, however, varies, at different times, according to the degree of pain which has been latterly experienced. The neck and body of the uterus feel slightly swollen; but this condition also exists in different degrees; sometimes being sufficiently manifest, sometimes scarcely or not at all perceptible. Excepting, however, this tenderness, and the occasional swelling, or rather tension, the uterus feels perfectly natural in structure. There is no evidence of scirrhus in the neck; the orifice is not misshapen, nor are its edges indurated. The circulation is but little disturbed; the pulse is soft, and not much quicker than is natural, but it is easily quickened by the slightest emotion. In a few instances, however, there has been a greater and more permanent excitement of the general circulation. The degree in which the health has been reduced has been different in different cases. A patient who was originally delicate, who has suffered long, and has used much depletory treatment, has been, as might reasonably be expected, the most reduced. She has grown thin, pale, weak, and nervous. Menstruation often continues regular, but sometimes diminishes or ceases altogether. The functions of the stomach and bowels are not more interrupted than might be expected from the loss of air and exercise; the appetite is not good, and the bowels require aperients; yet nothing more surely occasions a paroxysm of pain than an active purgative. Such are the leading symptoms of this distressing complaint. To embody them in one view, let the reader imagine to himself a young or middle-aged woman, somewhat reduced in flesh and health, almost living on her sofa for months or even years, suffering from a constant pain in the uterus, which renders her unable to sit up, or to take exercise;—the uterus, on examination, unchanged in structure, but exquisitely tender, even in the recumbent posture; always in pain, but more or less frequently subject to great aggravations.

With regard to the pathology of these cases, Dr. Gooch observes, that the causes, to which this disease has been attributed, are generally considerable bodily exertion at times when the uterus is in a susceptible state; but he remarks, that the patients had previously manifested signs of a predisposition to it. They were all sensitive in body and mind, and many of them had previously been subject to painful menstruation. As to its proximate nature, he is satisfied by stating

that it consists in a morbid condition of the uterine nerves, attended by pain, and sometimes vascular fulness; and he likens it to the irritable breast, the irritable testis, and the painful condition of the joints which is sometimes met with in hysterical females. He does not venture to explain its pathology any farther.

A consideration of the cases of this disease which have come under my notice, appears to me to justify the following conclusions:—

First. That, in the majority of instances, irritable uterus is rather a sympathetic than an idiopathic disease of that organ.

Secondly. That it is sympathetic of irritative disorder of various organs with which the uterus has intimate relations, the irritation of which is reflected, either partially or entirely, upon the uterine ganglia and nerves.

Thirdly. That, whilst such reflected irritation is its immediate cause, it is remotely dependent upon a defective condition of the blood, which would appear to operate by producing a morbidly irritable state of the nervous system generally, and of the uterine ganglia and nerves in particular.

In support of these views I shall quote the following cases.

Case 1. Mrs. E. Nurden applied at the Paddington Free Dispensary, Sept. 20, 1850, suffering from pain in the region of the uterus, increased by standing or walking, and relieved by lying down. The pain radiated from the uterus to the groins and hips, and sometimes extended down the thighs. She had also a good deal of pain in the back and loins, and suffered much from bearing-down of the uterus. The pain varied in intensity, and was sometimes very severe. Menstruation had always been very painful. The os and cervix uteri were very sensitive to the touch, but not otherwise diseased; nor was the uterus displaced. She had suffered from these symptoms for upwards of twelve months. Previously to their accession she had not been in good health; she had been weak, and incapable of undergoing much fatigue. Her tongue had been for some time habitually furred in the morning; her appetite had been bad, her digestion attended with pain, and her bowels confined. She had had a great deal of trouble and anxiety, and was, when first seen, very weak and anæmiated. There was a loud venous bruit in the neck; her tongue was furred, and the digestive organs were disordered. The lower part of the spine was extremely tender on pressure.

The treatment which I recommended had especial reference to the abnormal condition of the blood, the disordered state of the stomach and digestive organs, and the irritable condition of the spine. I directed her to take ten grains of the ammonio-citrate of iron after each principal meal daily, and five grains of blue-pill every second night until the tongue became clean, with sufficient castor oil the following morning to insure a moderate action of the bowels.

October 22nd. She reported herself to be better: she felt stronger, the appetite was better, the tongue cleaner, and her bowels more regular. She had still, however, a great deal of uterine pain, and the lower portion of the spine continued very tender. The dose of the citrate

of iron was increased from ten to twenty grains, and she was directed to rub the lower portion of the spine with an ointment containing tartar emetic and croton oil, night and morning, until pustules were produced.

October 29*th*. She reported herself to be still better. The uterine pain was much less, and her general health was improved; but she had a good deal of leucorrhœa. The ammonio-citrate of iron was ordered to be discontinued; and, in its place, a draught containing fifteen drops of the diluted muriatic acid, twenty of the tincture of the sesquichloride of iron, and a drachm of the solution of bichloride of mercury, was directed to be taken three times a day.

November 26*th*. She was perfectly well. The medicine last prescribed, having agreed with her, had been regularly taken, and the counter-irritation, over the spine, had been also continued. The pain and irritability of the uterus was now entirely gone, as was also the leucorrhœa; her tongue was clean, and the digestive organs healthy. She stated that the counter-irritation, over the spine, gave immediate relief as regarded the uterine pain, which entirely ceased with the improvement of her general health.

Remarks. The circumstances which I have adverted to as productive of the irritable uterus, existed in a marked manner in the present case. The patient was extremely anæmiated on admission, and had probably been so for a considerable period; she had also undergone much mental anxiety and trouble; and these circumstances sufficiently explained the occurrence of dyspepsia, and an irritable condition of the spine, which may be regarded as having been the immediate cause of the uterine derangement. They were certainly antecedent rather than consecutive to it; and the uterine pain disappeared, without any special treatment, under measures calculated to remove them.

Case ii. L. Fross, aged 36, single, applied at the Paddington Free Dispensary, November 26, 1850, suffering from much pain in the uterus, and occasional bearing down. The pain varied in intensity at different times, and occasionally was very intense; it was sometimes relieved on lying down, but was not entirely removed. She had leucorrhœa, which was increased whenever the uterine pain was very severe. Menstruation was regular, but was attended with much suffering, which at times was so great as to make her apprehensive of the existence of inflammation. These symptoms were attended, and had been preceded by general weakness, and a depressed state of the general health. The patient was now extremely anæmiated; a loud continuous bruit was heard over the jugular veins. The tongue was habitually furred, and the stomach and bowels disordered. The lower part of the spine was also tender upon pressure. She stated that she had suffered from uterine symptoms for many years, and that she had consulted several medical men without obtaining much benefit. She was a sempstress by occupation, and had led a very sedentary life. The treatment which I recommended her was principally the following: to take an alterative dose of blue-pill every second night, as long as the tongue was unpleasant on awaking in the morning; to take the muriated tincture of iron three times a day with dilute muriatic acid, and with each dose a drachm of the solution of the bichloride of

mercury; the bowels to be regulated by castor oil, and the spine to be rubbed with tartar emetic ointment, night and morning, until pustules were produced.

December 17*th*. She was much better. The tongue was clean, the appetite good, the bowels regular, and she felt generally stronger. The uterine pain was much less; the leucorrhœa entirely gone. She stated that the uterine uneasiness ceased as the pustules appeared over the spine. She was directed to omit the muriate of iron, and take simply twenty grains of the ammonio-citrate of iron after each principal meal daily.

January 31*st*, 1851. She was perfectly well, and had no uterine pain nor leucorrhœa. The tongue was clean, the appetite good, and the bowels regular. Her menstruation took place a fortnight ago with scarcely any pain.

Remarks. This patient also was very much anæmiated; and, judging from the history of her case, had been so for some time. Again, her digestive organs were disordered, and the spine was tender upon pressure. It cannot, I think, be doubted that these conditions were consequent upon a state of mental anxiety which is almost inseparable from an occupation, which is precarious and ill-requited, and which requires late hours and a sedentary mode of life; and that upon these the uterine disorder had supervened. The treatment, therefore, was addressed to them rather than to the uterine malady; and the result proved that this view was correct. The existence of rather profuse leucorrhœa required special attention; for although it was probably a consequence of constitutional disorder, its continuance would operate unfavourably upon a patient who was evidently anæmiated. On this account the acidulated muriated tincture of iron was given in preference to any other chalybeate: and it had the effect in this, as in many other cases with which I have met, of entirely removing this symptom. The ammonio-citrate of iron was then substituted, in full doses, after each principal meal daily. The result of the treatment tends to show that, in this case, the uterine disorder was a symptomatic affection, inasmuch as it ceased, without any special treatment, on removing the constitutional derangement with which it was accompanied.

Case iii. Mrs. Woodger, aged 36, was seen Nov. 28th, 1850. She was suffering from violent pain in the uterus and left iliac region; she had also pain in the back, and a sensation of bearing-down, or forcing of the uterus. The pain extended to the hips, and sometimes darted down the thighs. It varied in intensity at different times, sometimes being very acute, and sometimes of a more subdued character. On a digital examination, the uterus was extremely sensitive; the slightest touch of the cervix produced great suffering; otherwise it was not perceptibly diseased, congested, or enlarged. These symptoms had been preceded, and were accompanied by a very flatulent state of the bowels, furred tongue, loss of appetite, and other symptoms of derangement of the digestive organs. The patient was also thirsty and feverish, but otherwise her general condition was that of weakness and depression. On inquiring into the history of the case, I found that she had lost her mother twelve months ago; that this had affected her very much; and that she had ever since been in

a nervous bad state of health. In July she had been confined; and, although the labour was easy and natural, and unattended by any unusual hæmorrhage, she had been seized, a fortnight afterwards, with considerable pain in the uterus, evidently of a neuralgic character, which was removed by soothing and sedative measures. The present attack was also apparently neuralgic; and it appeared to depend immediately upon disorder of the chylopoietic organs, together with spinal irritation, whilst remotely it was connected with the painful state of mind, and depression of the nervous system, which had been occasioned by the death of her mother. The indications which I proposed to fulfil, in regard to treatment, were, first, to correct the disordered condition of the stomach and bowels; secondly, to allay the morbid irritability of the nervous system; and thirdly, to remove the spinal irritation. For these purposes she was ordered three grains of calomel immediately, and afterwards the sulphate of magnesia in decoction of aloes and cinnamon-water, at intervals until the bowels were properly opened; to have a linseed-meal poultice applied over the abdomen, and a sinapism over the lower part of the spine, and to take, at bed-time, five grains of Dover's powder.

The next day the pain was lessened; the bowels had been much purged, were less flatulent, and the tongue was cleaner. There was still, however, much uterine pain, and the spine continued very tender on pressure. In consequence of this, the lower part of the spine was ordered to be rubbed with the tartar emetic ointment night and morning, until pustules appeared; and she was directed to take five grains of Dover's powder at bed-time, if in pain, or incapable of sleeping.

In the course of a few days, the spine became irritated by the ointment; and, upon this taking place, the uterine pain entirely ceased, and all that she complained of was weakness and loss of appetite. For this she was given the diluted nitro-muriatic acid, in water, three times a day before meals, and she was ordered a nutritious diet. No other treatment was required from this time. She progressively got better; her appetite improved; she got strong, and has had no return of uterine pain up to the present time.

Remarks. The predisposing cause, in this case, appeared to be the generally depressed state of the nervous system, which was occasioned by the mental uneasiness induced by the death of the patient's mother; and to this state of mind we may, I think, attribute the spinal irritation which was so prominent a feature in the case. Nor can it be doubted that this, together with some casual derangement of the stomach and bowels, was the exciting cause of the uterine malady. The antecedent circumstances of pregnancy, parturition, and suckling, would also favour its occurrence, by weakening the constitution, and rendering the nervous system more susceptible to impression. The ready cessation, however, of the uterine disease on correcting the disorder of the digestive organs and the irritable condition of the spine, proves that it was symptomatic, and that it did not depend upon idiopathic disease of the uterus.

Case iv. Elizabeth Morgan, aged 21, married, but having no children, applied at the Paddington Free Dispensary, suffering from ex-

treme pain in the uterus. The pain extended to the groins and hips, and was always relieved by lying down. The uterus was very sensitive to the touch, but not otherwise diseased. She complained of much pain and dragging at the back, had profuse leucorrhœa, and menstruated every three weeks, but without pain. She had suffered from these symptoms some time; but, before they commenced, she had been out of health. The tongue, for some time past, had been dry and unpleasant on awaking in the morning, although tolerably clean during the day. She had been for some time weak and low, and had undergone much anxiety and trouble. On admission, she was anæmiated and dyspeptic, and the lower part of her spine was tender. The treatment which I recommended her was very simple. I prescribed the muriated tincture of iron with diluted muriatic acid, three times a day, and with each dose a drachm of the solution of the bichloride of mercury. At the same time the lower part of the spine was to be rubbed with tartar emetic ointment, night and morning, until pustules appeared. She continued this treatment for a month, and the entry then made is the following: "Has no uterine pain or uneasiness, no leucorrhœa, and no pain in the back; tongue clean, appetite good, bowels regular." The uterine pain ceased as soon as pustules appeared over the spine, which occurred four days after the commencement of the use of the tartar emetic ointment.

Remarks. The uterine pain appeared in this case to be almost entirely a consequence of spinal irritation, which again was probably due to mental uneasiness. The disorder of the digestive organs was very trivial, and was removed by drachm doses of the solution of the bichloride of mercury. The muriated tincture of iron, in combination with dilute muriatic acid, was given in preference to any other chalybeate, on account of the existence of profuse leucorrhœa.

Case v. Mrs. Ann Dove, aged 40, married, consulted me Jan. 1, 1851, suffering from intense and persistent pain in the uterus and right iliac region. The pain, although constant, was very much aggravated at times. She had been suffering from it for three weeks; and it supervened upon an interruption to menstruation, which was occasioned by her getting wet feet. Previously to this, however, she had not felt very well; and her digestive organs in particular had been very much deranged. The pain was attended by a frequent bearing-down sensation of the uterus, and she experienced great uterine suffering whenever the bowels acted. It was always worse when standing or walking, and better in the recumbent position. She had had profuse leucorrhœa for the last three weeks. The bowels were very flatulent and constipated, and the cæcum was especially distended. The tongue was very much furred, and the appetite bad; she was also feverish and thirsty, and had rheumatic pains in the limbs, which were generally worse at night. The coexistence of febrile disturbance with very marked derangement of the stomach and bowels, led me to direct her to take at once an emetic of ipecacuanha and squills; and, subsequently, three five-grain blue pills, with an interval of six hours between each. She was further ordered to take five grains of the sesquicarbonate of ammonia, and of the bicarbonate and nitrate of potass frequently in water.

On the next day, she was considerably better. The tongue was cleaner; and the pains were generally less in the stomach, uterus, and limbs. The emetic had produced full vomiting, and a large quantity of sour offensive matter had been thrown up. The bowels had acted twice. On the following day she was still better, and, in fact, convalescent; the uterine pain had ceased, the appetite was good, and the tongue clean.

Remarks. This case affords a good illustration of the sympathy which reciprocally subsists between the uterus, stomach, and the constitution at large. A casual interruption of menstruation was immediately followed by great constitutional disturbance of a febrile character, in which the stomach and digestive organs were especially involved; and there is every reason to believe, that the reaction of the latter upon the uterine organs was the cause of that intense uterine pain and uneasiness which were so prominent in the case. By adopting prompt measures for the relief of the chylopoietic disorder, a rapid cessation of the uterine pain was the consequence; and this independently of any other treatment. The case so far is extremely instructive; and, indeed, is rather introduced as illustrative of the general pathology of uterine diseases, than of the form more particularly under consideration.

Case vi. Charlotte Ward, aged 31, applied, November 5th, at the Paddington Free Dispensary, suffering from great pain and bearing down of the womb, with pain and dragging in the back; both were increased by walking or standing, and relieved on lying down. She suffered severely from leucorrhœa, and menstruated every three or four weeks, with much pain. There was a slight prolapsion of the uterus, and the organ was extremely sensitive to the touch, though not otherwise diseased. She had been suffering from uterine derangement for many years. She had had five very difficult labours, each of which had been preceded by marked disorder of the stomach and digestive organs. She had had, also, a great deal of mental anxiety. Eighteen months ago, she had been prematurely delivered of a still-born child; and the immediate cause of this was fretting and trouble. Her tongue was, and had been for some time, habitually unpleasant; the appetite was bad; and the bowels were scantily relieved. The lower part of the spine was very tender on pressure. She had been in very bad health ever since her marriage, in consequence of extreme anxiety. The first effect of this upon her constitution, was disorder of the stomach and digestive organs; and upon this uterine derangement soon supervened. She was now very weak and anæmiated, and had a distinct venous bruit in the neck. I prescribed for her ten grains of the ammonio-citrate of iron, and five of the sesquicarbonate of ammonia, in water, after each meal; also five grains of blue pill every night for three nights; and directed the lower portion of the spine to be rubbed night and morning with the tartar-emetic ointment until pustules appeared.

November 7. She felt better. The tongue was cleaner and more pleasant; the appetite better. The spine had been a good deal irritated by the ointment, and the uterine pain was much less. The leucorrhœa,

however, continued very great. She was directed to discontinue the use of the ointment; to take a blue pill every second night; and to substitute for the ammonio-citrate of iron, a mixture containing the muriated tincture of iron, with diluted muriatic acid and a solution of the bichloride of mercury.

November 18. She was much better and stronger. The tongue clean, and the bowels regular. The leucorrhœa was quite gone, and she had very little pain in the uterus. She was directed to continue the medicine.

December 3. She reported herself quite well; and was accordingly discharged, cured.

Remarks. The principles upon which this case was treated are sufficiently clear from the narrative. The patient, prior to the commencement of uterine derangement, had been very much out of health. She had been weak and low, had been suffering from disorder of the chylopoietic organs, and had been prematurely delivered of a still-born child, doubtless the effect of weakness and general ennervation. All this had been preceded by great mental uneasiness; and this would account for the irritable state of the spine, which was so apparent when the patient was first seen. It was probable, moreover, that the uterine disturbance depended upon this, together with the disorder of the digestive organs; and this view, which was suggested by the history of the case, was confirmed by the results of treatment. The remedial measures were exclusively addressed to these conditions; and, on correcting them, the uterine malady disappeared without any special treatment whatever. This case tends strongly to shew that uterine disease, however severe or long continued, is for the most part symptomatic; and that it can only be successfully dealt with, by carefully attending to those remote causes in which it has originated.

Case vii. Margaret Nadauld was seen by me, October 1, 1850, suffering from very intense pain in the uterus and left iliac region. The pain was of a very excruciating character, was increased by the least pressure over the uterus, and the slightest touch of the cervix was followed by great suffering. There was, moreover, a great deal of febrile disturbance, a quick pulse, hot skin, furred tongue, thirst, and disordered bowels, The lower part of the spine was very tender; and, on pinching up the skin of the left iliac region, the patient evinced a good deal of distress. The case so far was clearly neuralgic; and, on investigating its history, there was every reason to believe that it had originated in a fright which the patient had had a few days before. She was directed to have a linseed meal poultice applied over the hypogastrium and left iliac region, and a sinapism to the lower part of the spine. One grain of calomel, and five of Dover's powder, were to be taken every four hours, until three doses had been taken; and, on the following morning, as much castor oil as would insure a full action of the bowels.

The next day, the symptoms were all abated; and, so far as the immediate attack was concerned, the patient considered herself to be convalescent. I was, however, again consulted by this patient a few weeks afterwards, on account of general bad health, and chronic uterine disease. It appeared that she had been for many years in

indifferent health, that she had been weak and nervous, and had suffered more or less frequently during this time from pain and uneasiness in the uterus, especially when walking or standing. A digital examination did not reveal any sufficient cause for the pain; the position of the womb was natural, but the cervix was extremely tender to the touch. She had had a severe labour twenty years before, and thought that the womb was then injured, as she had never been quite free from uterine uneasiness since. She suffered very much at each menstrual period, and was sometimes confined to her bed in consequence. She had no leucorrhœa. The lower part of the spine was still painful on pressure, the tongue and digestive organs were disordered, she was thin and anæmiated, and there was a loud venous murmur in the neck. She had gone through much anxiety and trouble, and for some time past had been living very low. She was ordered to take ten grains of the citrate of iron, and five of the sesquicarbonate of ammonia, in water, after each meal; to take five grains of blue pill every second night, until the tongue and digestive organs were healthier; and to rub the lower part of the spine with the tartar emetic ointment, night and morning, until pustules appeared. This treatment was continued for about a month, and she then reported herself quite well. The entry I made is the following: "Is quite free from uterine uneasiness. The ointment produced a good deal of irritation; and ever since she has been entirely free from uterine pain or bearing down." This, she says, "has not been the case for twenty years."

Remarks. This report contains in reality the history of two distinct forms of uterine disorder; the one an attack of acute uterine irritation, attended by much constitutional disturbance and fever, and immediately occasioned by fright or severe mental agitation; the other that of a chronic form of uterine neuralgia, dependent upon derangement of the general health, anæmia, disorder of the stomach and bowels, and spinal irritation. When called upon to see the patient in the first instance, I had no previous acquaintance with her, and my attention was entirely directed to the relief of her acute sufferings. These subsided quickly, under the treatment adopted; and some weeks subsequently elapsed before I was again consulted by her. I then learnt that she had for many years suffered from chronic uterine disease, which, no doubt, had predisposed to the more acute attack for which I had previously attended her; and this is so far important, as showing that, when such predisposition exists, any occasional cause, such as sudden fright, shock, or emotion, may light up such a degree of irritative disorder and consecutive febrile disturbance, as it would be difficult otherwise to account for. The treatment in both instances was conducted upon principles which have been frequently adverted to, and therefore need not be enlarged upon.

Case viii. Jane Tresey, aged 26, single, applied to me for advice, suffering from pain in the uterus, back, and loins, bearing down, and at times intense suffering in the womb. She had, also, leucorrhœa; and, although menstruating regularly, had much pain at each monthly period. Her digestive organs were a good deal disordered, and she was weak and anæmiated. She had been suffering from these symptoms for a twelvemonth. She had previously been out of a situation,

and had in consequence become anxious and uneasy. This was soon followed by derangement of the digestive organs, and subsequently by uterine uneasiness and leucorrhœa. The spinal column was not examined. She was directed to take ten grains, increased to twenty, of the ammonio-citrate of iron, after each principal meal; and five grains of blue pill at bed-time, when the tongue was unpleasant on awaking in the morning. This treatment was continued for three weeks; and, in addition, she was directed to sponge the lower part of the back with cold salt and water night and morning. At the end of this time, she was better in every respect. She had no uterine pain nor leucorrhœa; the tongue was clean, the appetite good, and she felt altogether very well.

Remarks. This was a simple case of irritable uterus, arising from disorder of the general health, not very protracted, and therefore not difficult of cure. An impoverished state of the blood, with its usual consequence, dyspepsia, appeared to have been its sole cause; and the mere exhibition of steel in full doses was sufficient to accomplish the cure. The leucorrhœa ceased with the irritability of the uterus, shewing that, if it did not depend upon it, it had at least a similarity of origin. This, in fact, will be found to be frequently the case. Irritation of the nerves of an organ is generally followed by increased secretion, either from it, or some other with which it is sympathetically allied: this indeed is a mode of relief which is often spontaneously set up by nature, and, in proportion as it takes place, are suffering and disorder alleviated. To regard it, therefore, under such circumstances, as a disease which should be immediately checked, would be unsound in principle, and fraught with danger in practice; whilst, on the other hand, the removal of its remote causes is often followed by its spontaneous cessation, as shewn in the present case.

Case ix. Sophia Wheeler, aged 33, applied at the Paddington Free Dispensary, suffering from pain in the uterine region, more or less constant, but liable to severe exacerbations every two or three days. She had also great pain in the back and loins, and profuse leucorrhœa. She had laboured under these symptoms for many years. On a digital examination, the cervix was found to be extremely tender, but the uterus was not prolapsed, nor presented any unnatural condition, except a little puckering and irregularity about the os. Menstruation had been regular until her late pregnancy, but had always been attended with much pain. She had been confined five months ago, and had menstruated twice since. She had six children, and had suffered much from hæmorrhage at each birth. She was never very strong, or equal to much fatigue, and for years had suffered greatly from anxiety. The tongue had been also for many years very much furred and unpleasant in the morning; her digestion bad, and her bowels confined. She was extremely weak and anæmiated; and there was a loud venous bruit in the neck. The tongue and digestive organs were very much out of order. The spinal column was morbidly tender in various parts, and she was nervous and hysterical. She was ordered the muriated tincture of iron with muriatic acid, and the solution of bichloride of mercury in infusion of serpentary, three times a day; a blue pill at bed-time occasionally, and the

tartar emetic ointment for the spine. The treatment, however, was not long continued. The patient, at the time of attending, was in so much trouble and distress, that it was useless to expect much benefit from medicine—a circumstance which I pointed out to her. She therefore discontinued her attendance; but the case is instructive, as pointing out the existence of those forms of constitutional derangement, which have been remarked to be the cause of uterine disorder.

The last case I shall quote is that of a farmer's wife, who came from a considerable distance in the country to obtain advice in London. She had been for many years a severe sufferer from uterine disease, and had been treated by many practitioners without any benefit. Whether the treatment I recommended was serviceable or not, I have no means of judging, as I only saw her on the occasion of her consulting me.

Case x. Mrs. A. H., aged 37, was seen November 16, 1850. Her symptoms were severe pain in the uterine region, more or less constant, but very much worse at times, and much pain in the lower part of the back, extending round to the uterus, and darting down the thighs. She had had this pain about nine years. It was preceded by great mental anxiety, and by a miscarriage, which was brought on by jumping off a gate, and this was followed by considerable hæmorrhage. Ever since, she had been very much out of health; she had scarcely ever been free from uterine pain, which was always increased by walking or standing. The digestive organs had been throughout disordered; the tongue habitually unpleasant of a morning, and it was now much furred at the back. The spine was altogether very tender, but more particularly its lower portion, and the skin of the left flank was morbidly sensitive to the slightest touch. There was a loud venous murmur in the neck, and the patient was weak, nervous, and much depressed. She had been under the treatment of several medical men, who had each taken a different view of her case. By one she was said to have inflammation and ulceration of the cervix uteri, and she was cauterised for a long time, and leeches were applied to the uterus, but without any benefit. On a digital examination, the cervix was exquisitely tender, so that the slightest touch gave extreme pain, but it was not otherwise diseased. On the anterior part of the uterus, there was a distinct enlargement, probably fibrous. The axis or direction of the cervix was normal, and the only perceptible lesion was the extreme sensitiveness of the organ. The patient was regular, but menstruated with great pain. She had no leucorrhœa.

The uterine symptoms having been preceded by mental anxiety and much loss of blood, the spine being very tender, the digestive organs disordered, and the blood evidently impoverished, I was led to consider these circumstances, in the absence of any appreciable disease of the uterus, as furnishing the principal indications of treatment. I recommended the patient to have the spine rubbed night and morning with the tartar emetic ointment until pustulation was produced; to take five grains of blue pill every second or third night, as long as the tongue was furred; to regulate the bowels by mild aperients; and to take the citrate of iron after each meal, increasing the dose gradually from ten to twenty grains; to live well, and to adopt such a regimen

as was calculated to improve the general health. As I have before said, I have not seen the patient since, and therefore I do not know the result of the treatment. I had a note a few days after my interview with her, informing me that the ointment had produced a very angry eruption; a circumstance which would tend to show that the blood was not only impoverished, but bad; and so far to confirm the correctness of the view which had been taken as to the sympathetic origin of the uterine affection. At all events, the coexistence of spinal irritation, irritative disorder of the digestive organs, and anæmia, with uterine disease, was very evident in this case, whatever may have been their mutual relations.

General Remarks. Upon a general review of the preceding cases, the first inference I would venture to draw from them is, that they are affirmative of the truth of the propositions which were advanced at the commencement of this paper. In all, the uterine affection appeared to be consecutive to, or sympathetic of, constitutional derangement or irritative disorder of other organs. In none could it be regarded as dependent upon idiopathic disease of the uterus; and additional corroboration is derived from the fact, that it disappeared, in most instances, under the influence of treatment of a general rather than of a specific character.

Another inference which may be drawn from them is, that the influence of gastro-intestinal disorder and spinal irritation are very considerable in the causation of uterine derangements. In the majority of the cases reported, these coexisted, and would seem to have had a similarity of origin. In all, they were associated with anæmia, and had been preceded by much mental anxiety. How much, therefore, is due to each in the production of the uterine symptoms in these cases, it is impossible to say. Many circumstances, however, which have come to my knowledge, lead me to believe that derangements of the uterus, involving more particularly its nutritive and secretory functions, such as leucorrhœa and disorders of menstruation, have rather a gastro-intestinal origin when sympathetically induced; whilst those which affect more particularly its sensory functions, producing neuralgia, and various irritable conditions, are for the most part connected with an irritable or morbid condition of the spinal cord.

But it is not contended, that hysteralgia is in all cases necessarily connected with either spinal irritation, or gastro-intestinal disorder. I believe them to be very frequent causes, but I have met with instances in which it existed irrespectively of either. In gouty and rheumatic subjects, considerable uterine pain, more or less of a persistent character, is often met with, doubtless of a gouty or rheumatic nature; and I believe that severe irritation of any important organ or nerve may, under certain circumstances, be reflected upon the uterus, so as to give rise to very distressing symptoms. In illustration of this, I will quote the following case, which was published by Mr. Davis in the *Lancet* of August 1, 1846, page 125.

A patient, six days after labour, was attacked with severe pain, of an intermittent character, in the region of the uterus, and during the intermissions she had pain in the face. Leeches, fomentations, etc., were applied to the abdomen, and calomel and opium were given in-

ternally, but without avail. At length, the pain in the face becoming more severe, inquiries were made, which led to the discovery that one of the dentes sapientiæ was coming up, and causing inflammation and swelling of the gum. A free incision was accordingly made in the swollen gum, and an entire cessation of the uterine pain immediately followed, without any other medicine being given.

In this case, we have an instance of uterine pain arising from a peculiar but by no means unusual cause; and it may be a question whether some of the neuralgic affections of the uterus, which occur in young females, may not depend upon it. Every one is aware of the sympathy which subsists between the nerves of the uterus and those of the teeth; and that consequently, during pregnancy, tooth-ache is a frequent occurrence. I am not, however, aware that this is considered to be reciprocal, although the present case would prove it to be so certainly. As regards many other sympathies, I have reason to believe that such is the case, and that the uterus as fully sympathises with morbid conditions of particular organs and the constitution at large, as do these with abnormal or peculiar conditions of the uterus.

In further illustration of the pathology of these affections, I have made the following analysis of thirty-seven cases, in which the uterus was in a morbidly irritable state, not in consequence of displacement or appreciable disease. In all there was marked pain and uneasiness in the region of the uterus, which varied in intensity in different instances, and in some had been of long continuance.

I. Uterine Complications were observed in the following proportions.

In 3 there was no other uterine disease.
„ 15 the pain was complicated with leucorrhœa.
„ 7 „ „ „ „ leucorrhœa and dysmenorrhœa.
„ 3 „ „ „ „ leucorrhœa and amenorrhœa.
„ 1 „ „ „ „ leucorrhœa and menorrhagia.
„ 4 „ „ „ „ leucorrhœa and irregular menstruation.
„ 4 „ „ „ „ dysmenorrhœa alone.
„ 2 „ „ „ „ menorrhagia.
„ 1 „ „ „ „ fibrous enlargement of the neck of uterus.

II. Antecedents. The irritable state of the uterus had been preceded,

In 4 cases, by weakening discharges, such as profuse hæmorrhage, and protracted suckling.
„ 5 „ mental anxiety and distress.
„ 8 „ mental anxiety, with disorder of the digestive organs.
„ 2 „ sudden fright.
„ 18 „ disorder of the digestive organs.

III. Concomitant Affections.

In 18 there was well-marked anæmia, with disorder of the stomach and digestive organs.
„ 12 „ anæmia, with spinal irritation.
„ 3 „ spinal irritation.
„ 4 „ great irritability of stomach and digestive organs.

The facts, contained in the foregoing analysis, appear to me to justify the following conclusions:—

First. That, from the operation of the same causes, various and dis-

similar uterine diseases may be occasioned. Thus the principal antecedent circumstances in these cases were, for the most part, the same, and yet very different disorders were the consequence. In some, there was simply a painful condition of the uterus; in others this coexisted with leucorrhœa, amenorrhœa, dysmenorrhœa, menorrhagia, etc. The probable explanation of this is, that the operation of the different causes in question is primarily upon the nerves of the uterus, and that irregular actions, in regard to these, precede and give rise to those particular symptoms, which, in the aggregate, constitute disease as known by a given appellation.

Secondly. That, all these lesions may arise from constitutional disorder, may be perpetuated by it, and in many instances will cease on its removal. In these cases the chief circumstances which had preceded were either of an enervating or depressing nature; such as loss of blood, over-suckling, etc., or mental depression or uneasiness. The obvious effect of these would be to lower the tone of the nervous system generally, and to render it morbidly susceptible to impression. Thus it would happen in regard to the uterine ganglia and nerves, that they would be prone to irregular actions, and to participate readily in the morbid affections and conditions of other organs. If, again, the impressions leading to such abnormal actions are received from or through the medium of the ganglionic system of nerves, it is reasonable to suppose that the functions to which these are more immediately subservient, such as nutrition and secretion, would be more particularly disturbed, whilst those received from or through the medium of the cerebro-spinal system would rather give rise to painful and uneasy feelings; and thus may arise the difference in the uterine derangement which is consecutive to chylopoietic disorder and spinal irritation.

I am well aware that many of the cases of irritable uterus, which have come under my notice, and have been alluded to in this paper, were comparatively slight, as well as of recent occurrence, and therefore proportionately more amenable to treatment. I have, however, in no instance included under this title cases which were not attended by well marked pain and suffering in the uterus, bearing-down of the organ, and other uterine symptoms, irrespective of inflammation, displacement, or appreciable disease. In all, the general condition of the patients was that described by Dr. Gooch. They were nervous and hysterical, weak, and generally out of health; and the uterine pain appeared to be neuralgic. On the other hand, the cases which he has related were of a very confirmed and aggravated character; but, so far as I can judge from his account of them, they do not militate against the views which I have expressed, whilst the results of the treatment adopted tend rather to confirm them. In all the cases of irritable uterus which I have seen, the patients were, as I have stated, weak and enervated, depressed, and more or less anæmiated from the commencement; and treatment of the most invigorating character was, from the first, had recourse to, with the greatest benefit. Dr. Gooch's cases also appear to have been of the same description, but in which very opposite treatment had been adopted.

The first was that of a young lady who married at twenty-four, and, after her first confinement, went to a fashionable watering-place, and

there passed a winter of *laborious gaiety;* her mornings being spent in making calls, and her evenings in standing in crowded parties. *She lost her appetite, suffered much from languor, and became subject to shooting pains at the lowest part of her abdomen.* In consequence of an accession of pain, and a sense of fulness in the womb, she applied leeches, lived low, and was confined to her sofa several weeks. At the end of this time she was supposed to be well; but subsequently she had a violent relapse, attended with great pain and tenderness across the lowest part of the abdomen. From this time she appears to have been a great sufferer, and to have undergone very heroic treatment. She was bled four times in one week; blood-letting, either general or local, was afterwards repeated from time to time, and mercury was given to salivation. All this was done with very doubtful advantage, and her eventual recovery, after a protracted period of suffering, appeared to have been connected with the improvement of her general health, and a very cautious mode of living; but it is surely not too much to say that the treatment adopted, in the early stage, was calculated to impair very materially the tone of the nervous system, and to convert an ordinary neuralgic affection into one of very great severity.

The second case was that of a patient, who, when seen by Dr. Gooch, was so emaciated that he could encircle her arm by his thumb and middle finger. Her complexion was like wax; her digestive organs were very much disordered; so much so, that of every meal she brought up a portion; and her bowels never acted without medicine. Her pulse was small, weak, and quick, and easily quickened by the slightest motion. She had also profuse leucorrhœa. These circumstances surely indicated the existence of anæmia in a severe form; and yet blood-letting was one of the principal measures which had been had recourse to. Leeches had been applied, on an average, ten times a month; and if, as it is stated, the quantity of blood, drawn at each time, is estimated at two ounces, she must have lost about twenty ounces every month, and this while she was taking very little nutriment, and of that little rejecting a large portion. It is further stated, that the paleness of the blood, and the marble-colour of her face and skin, showed how the circulating fluid had been drained of its red particles. Such was her condition when she arrived in London, nearly twelve months from the commencement of her illness; and can it be a matter of surprise, after such treatment, that her nervous system generally was in a highly sensitive condition, and that the irritability of the uterus had become very great?

The third and last case mentioned is that of a young woman, who had borne four dead children, and therefore presumptively had not been very strong. Hæmorrhage had occurred after the last confinement, and was succeeded by pain in the hypogastrium and left iliac region. Her pulse is described as being small and wiry; a very common pulse, it is observed, after hæmorrhages from the uterus. The narrative informs us, that she was now bled four times in less than a week; that she lost in this time eighty ounces; that a number of leeches were applied to the hypogastrium repeatedly, and that, when seen a week afterwards, her face and lips were bloodless, her health broken, and that she had the local symptoms of irritable uterus, —it need not be added, in a very severe form.

Looking to the report of these cases generally, and their probable nature and origin, and observing the treatment respectively adopted in each, I confess I cannot feel surprised at their extreme severity. The existence of anæmia, weakness, and prostration, both antecedently to the attack, as well as concurrently with it, is conclusively shown, although the relation of these to the disease appears to have been altogether overlooked. Under such circumstances, what could have been expected from active depletion but the results which followed,—viz., increased anæmia, and a correspondingly greater irritability of the nervous system, more especially of those portions which were previously in a morbidly irritable condition?

Had the cases I have reported been treated in the same manner; had the patients to whom I have referred as suffering from irritable uterus, and who, together with this, were evidently weak, dyspeptic, and anæmiated, been bled frequently to the extent mentioned by Dr. Gooch; had they, in addition, been mercurialised, kept sedentary, and restricted in diet,—can it be doubted that their sufferings would have been proportionately increased? and that an irritable condition of an organ, otherwise slight, would have been rendered equally unmanageable and severe?

The practical conclusions, then, which I would venture to draw from the cases of this disease which I have myself seen, as well as from those reported by Dr. Gooch, are the following. In every instance of hysteralgia, or irritable uterus, it is absolutely necessary to look beyond the condition of the uterine organs for an explanation of the origin of the disease; to inquire particularly into the condition of the blood, and to ascertain how far it is either defective or excessive, or how far it is deteriorated by the prevalence of any particular diathesis, such as the gouty or rheumatic; to ascertain whether irritative disorder exists in organs which have sympathetic relations with the uterus, and to carefully investigate the condition of the brain, spinal cord, the nerves, and the nervous system generally. Such an investigation will often lead to the discovery of the causes of uterine irritability, where otherwise they would be overlooked; and will best furnish the principles upon which the treatment of the disease should be conducted.

Chester Place, Hyde Park Gardens, March 1850.

HINTS ON SOME RELATIONS OF MORALS AND MEDICINE,

WITH SPECIAL REFERENCE TO PULMONARY CONSUMPTION.

By THEOPHILUS THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption and Diseases of the Chest.

(*Read before the Medical Society of London, February* 15, 1851.)

THE object of this communication will be best secured by presenting, in the first place, a few simple and brief considerations regarding some of the principal Causes of Pulmonary Consumption.

The first of these causes is *hereditary influence*. There is, perhaps, no disease in which this influence is better established; and it peculiarly claims attention, in consequence of its power to perpetuate the effect of causes which might otherwise prove temporary, and restricted to the individual exposed to their agency. In more than a thousand patients examined at the Brompton Hospital, in reference to this subject, about a fourth had lost a parent from consumption. This mode of origin was traced about twice as frequently in the women as in the men; and it is worthy of observation, that the influence tends peculiarly to extend in the direction of the sex in which it first appeared. Of thirteen women at present under my care, whom I have questioned carefully on this point of inquiry, three have lost both father and mother, two their mother only, one the father alone. And this statement represents, on a small scale, the conclusions deduced from more extended statistical inquiry.

Secondly, no one will doubt that the influence of *bad air* must tend materially to the production of phthisis; and, assuming this to be the case, I may specify tailors, journeymen bakers, and printers, as likely to suffer in a high degree. Tailors constitute a large proportion of the patients at the Brompton Hospital—not less than 7·2 per cent. They are, unhappily, liable to many other diseases, and constitute about 5·8 per cent. of the patients of a general hospital. A class, representing but a small proportion of the male population, must be exposed to very unfavourable circumstances, to be rendered in so high a degree prone to disease. Journeymen bakers are subject to complicated causes of disease;—work prolonged for twenty hours; gas-light instead of sunshine; hot gusts of flour-dust instead of the fresh air:—and of the journeymen bakers in this metropolis, probably a fourth have symptoms of phthisis.

The next class to which I would allude is printers. Although it is probable that the number of printers in this city is not above one third as great as that of tailors, their per-centage is half as many in our list of applicants at the Hospital for Consumption; and their liability to consumption appears to be four times as great as to other diseases. But there is an important fact connected with the liability of printers, for the knowledge of which we are mainly indebted to the meritorious

investigations of Dr. Guy, a physician entitled to the best thanks of the public for his laborious inquiries. The fact is, that the liability of pressmen and compositors materially differs. During a long period of observation, it was ascertained that, whilst the proportion of pressmen applying at King's College Hospital, who were consumptive, was one-fifth, that of the compositors amounted to one-fourth. The wages of the compositor being higher, and his habits fully as temperate as those of the pressman, we have to seek the cause of his greater proneness; and the obvious explanation would seem to be the want of the exercise which, in the pressmen, may be supposed in some degree to counteract the effect of confined air. This opinion derives confirmation from the observations made some years since by Lombard and Benoiston, on the effect of exertion of the arms in counteracting a tendency to phthisis.

The third cause, at which I shall only glance, is *dissipation*. The depressing influence of this cause will be readily acknowledged. To syphilis and mercury I have repeatedly traced the first origin of consumptive disease. In the majority of the male patients at present under my care, this influence seems to have had a considerable share in the production of phthisis. This leads me to notice a remarkable fact, as regards the liability of soldiers to consumption. Even the Dragoon Guards, who are more favourably circumstanced than many divisions of our army, exhibit annually a mortality of ·63 per cent., whilst that of the male population of England and Wales is only ·37 per cent. At first sight, it is probable that the cause above referred to would be suggested in explanation; and I am ready to acknowledge that our gallant soldiers, although above fear, are not so constantly as we would desire above reproach. But this explanation proves inadequate, when we reflect on the comparative immunity of sailors from the disease; and I cannot but attach importance to the explanation suggested by Dr. Duncan, viz.: "The listlessness of their life, and the dull monotony of drills and parades." (*Dublin Medical Journal*, vol. ix, p. 32.)

I am thus conducted to a branch of the inquiry, to which I am specially anxious to invite attention; namely, *the effect of mental impressions in predisposing to phthisis*. We are apt to forget the remarkable influence of emotion in modifying respiration; but, if any one will observe his breathing when any depressing subject is dwelling on his mind, he will soon be convinced of the tendency of such depression to retard the respiratory act. The terms breathless anxiety, breathless suspense, are not mere metaphors. The idea implied in these popular expressions is forcibly introduced by the patriarch Job, chap. ix, verse 18: "He will not suffer me to take my breath, but filleth me with bitterness":—and it may not be inappropriate to suggest how aptly this passage illustrates the fact that, while the language of inspiration is preeminently adapted for conveying truth, not to philosophers alone, but universally, even to the untutored multitude, it nevertheless, on occasions consistent with this principle, combines in a remarkable degree scientific accuracy with general comprehensibleness.

Inasmuch as mental depression may interfere with digestion, it may

lead to various maladies; but by retarding respiration, and thus inducing pulmonary congestion, I believe it specially tends to promote the deposition of tubercle.

It is not improbable that such an explanation may be applicable to a common condition of the recluse student, and the man of refinement, who shrinks from the busy scenes of active life, and, worn with cerebral labour, is "sicklied o'er with the pale cast of thought".

The medical statistics of our prisons afford striking illustrations of moral causes of disease. Dr. Baly has shown, from extensive observations of prisons in various parts of the country, and in America, under great varieties of climate, diet, and general regulation, the prevalence of one common circumstance,—namely, greater liability to consumption than exists among the population generally; amounting, in the case of the Millbank Prison (where, however, it must be acknowledged that a combination of unfavourable circumstances are in operation), to about four times the average; the time required for the full development of the effects of the unfavourable influence being about three years.

An interesting question arises, whether the causes referred to in this communication are equally influential with both sexes. The statistics which I have at command indicate a considerable difference. In London, the mortality of women from phthisis is much less than that of men, and the advantage is specially observed in married life; the proportion of the female cases to the male, under such circumstances, over the age of twenty-five, being as three to five. This remarkable fact can scarcely be due to other than moral causes; and such are easily assigned. Man, in struggling for the support of his family, is beset with anxious care; woman, with more faith and patience, provided she receives her just share of consideration and tenderness, fulfils cheerfully the duties of the day, and does not so anxiously regard the morrow.

The records of the Registrar-General supply, as it seems to me, an additional confirmation of this view, in the remarkable fact, that the mortality in some provincial cities, as well as in the metropolis, is least for women; but that in the counties the proportion is, in a higher degree, to the disadvantage of the female. The only important exception to the rule, as respects provincial cities, is Leeds, in which the excess of female mortality is equal to that in the kingdom generally. I know not how these facts are to be explained, except by some peculiarities of moral condition. As a test of this condition, it has occurred to me to examine the Registrar-General's return of the number of illegitimate children born respectively in certain districts which I had previously noted, as illustrating the fact just specified.

The order of increase, in the proportion of female mortality, is exhibited in the following table of the per-centage of deaths observed, in each instance, on 200,000 of the population, as deduced from the Registrar-General's return for the year 1837.

I have given, in an additional column, the per-centage of illegitimate children in relation to the whole number of children born; and although the returns, in this respect, are unavoidably for a different year, the relative proportion of different places for several successive years sufficiently corresponds to obviate any incidental fallacy.

	Deaths from Phthisis.		Proportion of illegitimate children to children born.
	Men.	Women.	
London	·455	·377	3·2 per cent.
Liverpool and West Derby	·595	·571	3·6 —
Manchester and Salford	·549	·548	5·8 —
Leeds	·440	·477	6·0 —
England and Wales	·378	·408	7·0 —
Paris, according to Benoiston ..	·288	·480	28·0 —

It is not intended to imply merely that the mothers of illegitimate children are peculiarly prone to phthisis, but that, in districts where the proportion is high, such a system of morals may be assumed to prevail as must extensively expose the female population, in a marked degree, to causes of moral disquietude. The return from Paris, even admitting some deduction on the ground of large Foundling hospitals, is remarkably high; and the female mortality of that metropolis, from phthisis, is not less striking. It will scarcely be disputed that, in any district notorious for the number of children born out of wedlock, there will the women be least happy in condition, most exposed to hope deferred, unrequited affection, bitter ingratitude, and all the causes which tend to wither the heart of those whose life may be said to ebb and flow with their emotions. If the power of mental causes to induce such disease were disputed, many instances might be adduced in support of my opinion. Let one suffice. In some parts of Wales a superstition still prevails that, if the image of any individual be put into one of the charmed wells, as that image melts away, the person represented will pine and die. A beautiful young woman had refused to marry a dwarfish and almost idiotic neighbour. The mother of the young man used every solicitation on his behalf in vain, and then, in revenge, declared she would put the image of the obstinate girl into the well. The poor girl credited the superstitious tale, and soon fell ill. An eminent physician, to whom I am indebted for the narrative, watched her with interest, prescribed for her symptoms, and strove to dispossess her mind of the idea which so painfully beset her, but in vain. There was no hereditary tendency, nor any other explanation of the origin of the disease; but phthisis distinctly manifested itself, and in six months she died.

Impressed as I am with the conviction, that depressing moral influences often induce consumption, I am not less persuaded that cheerful impressions tend to retard the disease. I have long observed that the patients improve more rapidly, and that the mortality is less, in the large than in the small wards of the Brompton Hospital, although the space allowed is proportional to the number of patients admitted into them; a result very different from that which we observe in diseases associated with morbid poisons, and even in some epidemics, especially influenza, in which the existence of such virus is disputed. The influence of cheerful society I have particularly observed amongst the female patients. And here I would remark, that women, from some peculiarity of constitution, bear confinement to the house in phthisis, and other diseases, better than men; whilst with men, horse exercise, and other muscular exertions out of doors, are more obviously useful,

and the evil of confinement is often greater than the risk of moderate exposure, even at a somewhat advanced period in the progress of disease.

Of the causes thus cursorily illustrated, as tending to induce and aggravate phthisical disease, some are under our own control.

First. The air of our apartments and workshops is not by necessity a contaminated air; open fire-places, with Arnott's ventilators, or a zinc-pipe, or some other simple precaution, will, to a great degree, correct the evil, and some hundred lives would thereby be saved annually in this metropolis alone. If the proportion of deaths from phthisis, among the artizans in London, were reduced to that which prevails among the gentry, fifteen hundred lives, at least, would be annually saved in this metropolis. No physical advantages can compensate for the evils incident to contamination or exclusion of light, air, and water. Vanity and ignorance may affect to regard disease as an exotic, but it is a narrow view to expect to exclude, by quarantine, diseases which close workshops can engender. A suspected ship is not so bad as a convicted house, in which not only sudden epidemics, but ailments still more destructive, although chronic, so readily originate.

Secondly. In addition to the use of free muscular exercise in the open air, great advantage would be derived from attention to the power with which the will is endowed over the respiratory muscles. And I cannot but believe, that some of the evils of close application to study would be obviated by occasionally pausing to practise breathing. On this subject I should be tempted to enlarge, were it not that the principle rests on physiological truths, which were well elucidated in a paper read to the Society by Mr. W. F. Barlow in the spring of 1849.[1]

Thirdly. It is the duty of the medical practitioner to take every opportunity of impressing principles imperfectly appreciated, but of great importance in relation to the production of consumption, and to place his influence in opposition to that inordinate estimate of lucre, which leads so many to forget that health is property of the highest value. He should enforce the truth, that ambition, disproportioned to power, is a constant source of physical exhaustion and moral disquietude; that it is difficult to calculate the amount of advantage which individuals would derive, if they would study to attain a correct estimate of their powers, and not engage in labours to which they are not adapted; and that health, as well as happiness, would be essentially promoted, if education were habitually conducted so as to train the mind for tranquil superiority to passing cares, and to fit for the exhilarating occupations of a useful life. Physical suffering is, in a great degree, attributable to ignorance or neglect of laws which are displayed for our instruction, and established for our advantage. And, as a general rule, it may safely be asserted, that "to be morally right is to be physically happy".

3, Bedford Square, February 1851.

[1] Barlow (Mr. W. F.) On Volition as an Excitor and Modifier of the Respiratory Movements. *Medical Gazette*, July 20, 1849, vol. xliv, p. 97.

ON THE STATE OF MEDICINE AMONG THE BURMESE.

By E. A. PARKES, M.D., Professor of Clinical Medicine, in University College; Physician to University College Hospital, etc.

(*Read before the University College Medical Society, in March* 1848.)

Every one engaged in the practice of medicine, all who have experienced the difficulties which encompass the treatment of the majority of diseases, must have felt a desire to know something of the state of medicine among other nations, and particularly among those who are removed from the influence of European literature and civilisation. We naturally wish to know what is thought of a disease by those who are not learned in our pathology, nor trained in our methods; we wish to note the success of the treatment which has not been dictated by the traditions of our schools, and which may possibly not be in accordance with our theoretical explanations.

And, apart from this natural curiosity, the imagination always conceives that, among the people inhabiting the central regions of the earth, among whom civilisation first arose, there may yet linger some traces of that antique and sublime philosophy, which gave its faith and its religion to Egypt, its poetry and its philosophy to Greece. In this hope, the medical science of the Hindus has of late years been fully studied; and if it has not been found to justify all the expectations which were entertained respecting it, still full justice has not, as I conceive, been done either to its philosophy or to its practical application. Not to its philosophy, because the mind of the European, energetic, practical, rapid in induction, and trained for some centuries in the employment of a rigid and logical method of thought, cannot appreciate the minute, subtle, half-mystical intellect of the Hindu; an intellect, perhaps never grand, colossal, and imposing, but peculiarly pliant, rapid, penetrating, and acute. Not to its practice, because the European has perhaps not sufficiently estimated the influence which climate and locality, peculiarities in living, and modes of existence have upon diseases. And the standard by which the opinions of the Hindu physicians, and, to go down to a later date, of the Arabians, and particularly of Avicenna, have been judged, has been exclusively European:—as if locality and modes of life, which from one primitive type can effect so wonderful an alteration in the man's external traits, which can originate the projecting lower jaw, wide nostrils, dark skin, and woolly hair of the Negro; the long dark hair, the square head, and narrow oblique eye of the Tartar; or the regular oval face, straight nose, and light skin of the Asian variety, would not also exert an immense influence in altering, to a certain extent, the type of a disease, and in appreciably influencing the reaction of the body on a morbid poison.

I do not wish at the present time, however, to enter into this subject. The remarks I am about to make, refer, not to the Hindus, but to a single nation of that great Mongolian race, whose several vast empires lie on the outskirts of British Hindustan, and with whom England is gradually, but surely, coming in contact.

If among these nations we have not the same objects of interest which attach to the Hindu race; if the Mongolians have not been, as far as we know, the first cultivators of science and the teachers of antiquity, still this variety of man has its own importance, and its peculiar interest. It is of high antiquity; it has displayed in its wandering and nomadic life very remarkable forms of civilisation; it is gifted with a bold and determined intellect, which has led its hordes more than once from the deserts of Asia, and the wild steppes of Tartary, into the very heart of Europe. And, at the present time, the mass of the Mongolian or Turanian nations are almost alone in the fact, that as yet they have been comparatively unimpressed by the action of European intellect. Everywhere else in Asia, the traces of Eastern thought and manners, the peculiarities of Eastern civilisation, are slowly but surely disappearing before the overwhelming power of the people from northern Europe. Persia is yielding to the gigantic force of Russia; Egypt and India are virtually the appendages of the British crown; and if, in the recent movement upon Burmah, upon China, and upon Borneo, we see the first attacks of the restless and roving Saxon upon these remote nations, still the impression has hitherto been slight and evanescent; the mind of the people has been as yet unaffected, and the peculiarities of thought are still as distinct as the languages which convey them.

In addition to this, the subject is worthy of being now brought forward, with reference to the Burmese, it has, as far as I know, been absolutely untouched. Opportunity has not yet been afforded to the officers of the East India Company to examine perfectly the medical books of the Burmese, as they have done the Shastras of the Hindus; and I believe the few remarks I have now to make will be all that has ever been made known on the subject. I must, however, apologise both for the imperfection of these remarks, and for the desultory manner in which they are arranged. I have been anxious not to weary the Society by dry details, however curious; and I must also confess that my own knowledge of the subject is so exceedingly slight, that, if it were not for its novelty, I should not have presumed to offer it.

Medicine is practised in Burmah by two classes—by priests and by laymen. The priests have naturally become physicians, because, as among all Bhoodhist nations, science is incorporated with religion, and is included in the sacred books. To become a priest, it is necessary to be a philosopher; the complicated Bhoodhism which is professed is founded on a vast and singular system of physics, which would be very interesting, if I could bring it forward on the present occasion.

This system, which, according to Bhoodhist belief, did not arise from the discoveries of man, but which was revealed in all its completeness by the last incarnate Bhood, Gaudama, necessarily comprehends to some extent the science of medicine, modified, however, in some measure, by commentators and expositors, the writings of whom appear to be all of ancient date. The fact of the theory of medical study being thus connected with religion, would have had the effect of throwing the practice of medicine entirely into the hands of the priests, in the same way as in the middle ages it was confined to the monks of Europe, if it had not been for the peculiar constitution of the Bhood-

hist priesthood. To this constitution I must shortly advert. The Bhoodhist priests are singularly like their Roman Catholic brethren; they form an order apart from the laity; they follow no occupation, but are engaged continually in reading the sacred books and in praying; they live in monasteries or *kyomys;* they are vowed to celibacy, and in some places they will not look on the face of a woman; they live upon alms, and will neither till the ground nor cook their own food, for fear of causing death to some living creature; they cannot own any property; they consider all the usual occupations of men as unworthy their regard, and they endeavour to keep their thoughts continually fixed on abstract virtues and on heavenly rewards. There are many curious resemblances between them and the Romish priesthood. They wear a peculiar dress, keep the head shaved, tell their prayers upon beads, perform innumerable penances for faults, and every now and then retire into solitude, and live for months on the scanty fare which the piety of a few enthusiastic devotees may provide for them. They seem to have no ambition, and no desire of propagandism; in fact, their own supremacy and that of their religion is so completely acknowledged, that there is no room for the development of the ordinary passions of man. They do not mix in the affairs of their nation; they give advice only if asked for it; they occasionally cast nativities at the birth of children, or, in moments of national emergency, consult the stars, for they are great astrologers, and prophesy. It might then be conjectured that these extraordinary men, in the world but not of it, elevated, like their houses, which are built round the temples on the hills, above the turmoil of human events, would not be great practisers of an art, which, more than all others, brings man in contact with his fellow man. Moreover, their creed debars them, as was the case also with the Catholic priests, from the practice of many branches of medicine, such as midwifery, the treatment of syphilis, and surgical operations. They practise medicine therefore merely incidentally, and from charitable motives, without view to profit or honour; at the same time, they have a high reputation, and are often consulted in desperate cases.

A class of laymen practising medicine has therefore gradually arisen, and is of considerable importance among the Burmese. Occasionally medicine is combined with some other pursuit; thus the Burmese doctor with whom I was most intimate, and from whom I learnt the greater part of what I know of the subject, was not only a doctor but a schoolmaster. Although the Burmese have not the divisions of caste of the Hindus, the pursuit of medicine seems to be handed down in families, as was the case among the Asclepiadæ in Greece. The doctors are not in any way licensed to practise, but the public seem generally to employ those who have been regularly trained; they are universally the collectors and venders of drugs. A doctor, or *sathamar,* is educated in the following way. At an early age, he is sent to a monastery, or kyomy, and is educated by the priests. This is the practice also among all the richer laymen. When he is supposed to be learned in all the wisdom of the Burmese, he returns home to his father, who is most probably a sathamar, and commences practice.

His course of study is similar to that common, I should suppose, to all primitive nations. While at the monastery, he has learnt a number

of empirical rules respecting diseases and their symptoms. Of anatomy he has no practical knowledge, although he has some traditionary notions, which are generally erroneous; thus he believes that there are three hundred bones, nine hundred muscles, nine hundred veins, etc. Physiology and chemistry are, of course, quite blanks to him. But he knows an immense quantity of drugs, and their usual action upon the body, and he has his formulæ for using them. He has also been carefully taught the differences of constitutions, and the influence of seasons upon them. It is in reality a completely empirical medicine, which looks not to causes, but to effects; not to the philosophical exposition of a disease, but to its prominent symptom and final result. It often appeared to me, that I saw, in the practice of these rude brethren of ours, a faint glimmering of that art which reached its perfection in Hippocrates; an art which arose from a rigid observation and comparison of symptoms, and of the relief afforded by remedies; an art which must always be true for the locality and habits of the place in which it originated, but which becomes false the moment it is transplanted.

But I must hurry on to consider the kind of rules and principles, with which the Burmese doctor will have commenced practice. The best way to describe these will be to give an abstract of a book on medicine, which was given me by my Burmese friend, as containing a short account of his principles. I must mention, however, that the books on medicine are very numerous, and this is merely one of the shortest treatises.

I cannot pretend to anything like a correct translation; all the medical books are written in the language in which the sacred books are written, viz., the Pali, a variety of Sanscrit; but, in the case of medical books, the Pali is written in the peculiar round Burmese character (which you will see in the book I have sent round, a common book, made of the leaves of the palmyra), and it is also interspersed with Burmese words. In making my translation, I was therefore compelled to get the Pali translated into colloquial Burmese; but although I employed two men, one of them a sathamar, to assist me in translating, we found it impossible in some parts to make sense of it.

The book opens with a preface, containing a long invocation to Gaudama, the last Bhood, praising his power and goodness, and desiring to imitate him. The life of Gaudama, his numerous transformations, and the virtue by means of which he became Bhood, or incarnation of Deity, from man, are detailed at length. Then follows an enumeration of the nine planets, and of the days of the week governed by them. Then the constellations, twenty-seven in number, are enumerated. The days of the week, the planets, and the constellations, are all affirmed to be connected by mysterious ties, and the names of the former are derived from the latter: thus, into *Tanengenwae*, or Sunday, the names of three constellations enter, viz., *Burnē*, *Pubarburne-gonā*, and *Pu-par-than*, and the same with the other days. However, it is unnecessary to go into these details.

After this preface, there comes a long description of the different temperaments or dispositions of people. The Pali word which I have translated temperaments, was translated into colloquial Burmese by a word *(dar-dath)* which corresponds exactly with the English word "temper".

There are said to be five temperaments; they exist in different proportions in all bodies, but they vary in their proportions in different persons and seasons. They are not described as being attended with any peculiar physical appearance, but it is curious that one of them is said to be attended by excess of bile, and another by excess of phlegm, and another is said, when in excess, to lead to madness. In these, perhaps, we may see the rudiments of the biliary or choleric, phlegmatic, and nervous temperaments, which have descended to us from the ancients, who were, in all probability, long posterior, in point of date, to the authors of the writings I am discussing.

Excess or deficiency in the temperaments produce disease; and these variations arise either from external conditions, as changes of season, etc., or from the agency of demons and evil spirtis. Thus the disturbance of the first temperament (*Ta-so-dah*) produces fever; hence a man has chills and horripilations; he is languid and afraid; has a distaste for food, etc.

The disturbance of the second temperament (*Wy-o-dah*) produces diseases of the chest or the head. If of the chest, there is sneezing, coughing, vomiting, dimness of sight, deafness, languor, restlessness, pains in the limbs, thick sputa. Occasionally there are swellings in the feet, and smarting of the eyes. If the head be more affected, there is pain, or, on the contrary, partial insensibility of the skin; half the body may become insensible; the face is drawn to one side; the tongue is stiff and numb; the fingers are stiff; the hands and feet are crooked; the loins bent.

If *Ar-bo-dah*, the third temperament, be diseased, the skin is affected; hence result venereal cutaneous diseases. The skin becomes copper-coloured, or like red flesh, or of a pale red colour, or like wax; there are spots on the skin and itching; the flesh cracks. Great derangement of this temperament produces small-pox, chicken-pox, and leprosy.

The fourth temperament, or *Put-ta-wye-dah*, produces bowel complaints, diarrhœa, and swelling of the abdomen.

The fifth temperament, (*Ar-can-dhar-dah*), when increased, produces peculiar dryness and scaliness of the skin. At other times, when decreased, it produces great sweating and emaciation; the perspiration is turbid.

The five temperaments are not all equally affected. Before the age of sixteen, phlegm is said to predominate; from sixteen to thirty-two bile predominates; afterwards again phlegm.

Then follows an account of the manner in which these temperaments, or elements of the body, as we might term them, are influenced by seasons. Thus *Ta-so-dah*, whose disturbance gives rise to fevers, is said to prevail in April, August, and December. *Ar-bo-dah* is said to prevail in October and July, etc.; but I need not occupy time with these details.

The next part enters into the description of remedies, arranged under the heads of the temperaments. The formulæ are almost innumerable, and consist chiefly of vegetables; arsenic, mercury, and antimony, are the only minerals named. When the temperament is disturbed, which gives rise to fever, emetics are ordered, and afterwards

spices, cloves, ginger, and numerous vegetables, chiefly aromatic stimulants, and a good many derived from large flowering vines.

But I can perhaps give a better account of their practice, by detailing the method of treatment of certain diseases.

I must first mention, that the diseases of these people are, in some respects, different from ours. Bowel complaints, marsh fevers, rheumatism, small-pox, syphilitic diseases, and leprosy are very common. Beriberi is seen sometimes; bronchitis and pneumonia are met with occasionally; phthisis also, but of its relative frequency I have no idea. Many of the diseases which result from our system of civilisation, from our large cities, the luxury of the upper orders, and the deprivations of the lower, are unknown there. Insanity and nervous complaints are not usual; dyspepsia and kidney diseases seem comparatively uncommon. But, of course, on all these points I speak almost at random; there being, in reality, no accurate data to go upon.

To combat these diseases they use an immense quantity of medicines, of many of which I know nothing. Among those best known to Europeans I may enumerate, opium, hemp, catechu, kino, gamboge, camphor, àreca, cardamoms, and all kinds of spices; anise, chalk, antimony, arsenic, mercury, castor oil, tobacco. Their formulæ are very complex; sometimes as many as sixty substances enter into one preparation. They give chiefly pills and decoctions. One remarkable medicine I must not forget to mention, viz., the "Tabasheer", or inspissated juice of the bamboo; it contains a large quantity of silica.

It is a curious circumstance, that among the sathamars a split or difference has of late years taken place; one class giving medicines in enormous quantity, the other limiting the quantity of medicine, and trusting chiefly to dietetics. In the following account I shall endeavour to describe the practice of the most rational among these two parties.

The most common class of diseases, after fevers, are probably bowel complaints. The food of the Burmese consists chiefly of fish, rice of different kinds, milk, and of various vegetables, particularly capsicum, and spices. They eat no meat, because they will not kill the domestic animals, although they will eat them when killed. In order to correct the acidity of their food, they are accustomed to take, once or twice in the course of the day, a small quantity of chalk and catechu. A few grains of chalk, carefully prepared and coloured with cochineal, are wrapped up in the leaf of a trailing plant belonging to the family of piperaceæ. A little bit of beetel nut is put into the mouth at the same time; and, after the whole mass has been sufficiently chewed, the teeth are rubbed with a tobacco leaf. Their diet almost requires the use of a dietetic antacid and astringent of this kind; it is a necessary luxury, which the poorest Burman indulges in.

When dysentery has once commenced, they endeavour to restrain it by the most powerful astringents, and their practice is very successful. Treat an Englishman in this way and he would be killed; the diarrhœa would not be restrained, or rather it would be aggravated by astringents; but, in the case of the Burman, one has to deal with a different system, and consequently with a modified disease. Dysentery is still inflammatory among them; but it is inflammation of a more passive

kind, running a course somewhat similar, giving rise to the same products, and yet not obedient to the same remedies.

Small-pox is treated admirably. The stages of the disease are well known, and the course of the disease determined. Low diet, the freest ventilation, and cold water, with perhaps a little antimony, form the only measures. The skin is sometimes bathed freely with cold water throughout the whole course of the disease, and this is said to be very useful.

Rheumatism assumes chiefly the form of chronic migratory pains. It is exceedingly common. Rheumatic fever is not, I think, known there. I never heard of it among the Burmese, and I never saw a case among the European soldiers, who would have been, I should think, subject to it. The chronic pains are chiefly treated by baths, shampooing,[1] and counter-irritation, particularly with the juice of certain euphorbia, which blister the skin in a very short time.

Syphilis is a most severe disease, and is, I think, aggravated by the method of treatment. Salivation is produced by fumigation with the fumes of heated mercury, and is kept up for some time. Secondary symptoms are notoriously frequent, particularly phagedenic ulcers of the skin. Accompanying these is a peculiar cachectic state of the constitution, which, when it has once originated, is seldom cured. The Burmans say, that a man so affected is ever afterwards unfit for labour. I may mention, that these unhealthy ulcers were found by a friend of mine, Dr. Tait, who was in charge of the corps of Rifles raised among the Burmese, to be cured very readily by large doses of cantharides.

Bleeding is seldom or never practised in any disease, and leeching is not much used. In fact, depleting measures are obviously unnecessary; the peculiar habit of body would not indicate them, and the severe inflammatory diseases—pneumonia and acute rheumatism—of our colder climate, are unknown there.

The Burmese are subject to some peculiar diseases, for which they have very efficacious remedies. At certain times of the year, chiefly in the rains, they are exceedingly infested with worms, particularly lumbrici. In children, and sometimes in adults, the general health seems completely to fail from the myriads of these animals. The worms are not developed by the peculiar diet of the Burmese, they originate in some peculiarity of climate; this is proved by the English soldiers being equally affected. When my regiment was first quartered in Burmah, we were astonished, at a particular time of the year, to meet with a number of children, who became enfeebled and cachectic, and, without visible disease, wasted and died. At the same time, we were surprised at being spoken to by many soldiers respecting lumbrici, which they said they had vomited. At first I thought little of this, as lumbrici are often vomited even in this country; but, after a time, the number of complainants became so great, that it was impossible not to see there was something more than usual in the case. On inquiry I found that such a disease was well known among the Burmans, who were accustomed to treat it by a certain remedy. This remedy, which they call "Wah-mo, or Wah-than-mo", is a fungus growing upon

[1] They shampoo exceedingly well—better than any other nation, except the Chinese—with elbows, fists, and feet.

the small prickly female bamboo. The Burmese collect it with great care during the rains, and preserve it in a dry place, well covered up. It is always in great request among them, and, in times of scarcity, has been sold for its weight in silver. I did not at first use the *Wah-mo;* but, after trying ordinary purgatives, turpentine, etc., without good results, I commenced with the Burmese specific, and was astonished at its effect. It was soon made out, that the cachectic state among the children was attributable to this immense collection of worms, and a few doses of the *Wah-mo* did wonders. I have known a child, of a few months old, discharge as many as sixty worms at one stool after two or three doses, and in the course of a few hours as many more; and from that time to regain appetite and flesh. It was equally efficacious in men, and the following year the soldiers bought it themselves in the bazaar, and took it in immense quantities. The *wah-mo* has a slightly acid reaction when fresh, and when it loses this, which it does very rapidly, it seems to become inert.

Diseases of the skin are common, particularly different forms of herpes, which seems to take the place which eczema occupies in this country. They use various irritating applications, particularly the acrid juices of some kinds of acacia and mimosa. Sandal-wood, rubbed down into a paste with water, is used for this purpose, and also by women as a cosmetic.

Leprosy is a very common disease, and is considered hereditary; so that the children of a leper, although not themselves leprous, are allowed to intermarry only with the children of other lepers. Lepers immediately become outcasts; and, in Burmah Proper, are obliged to live in leper villages, and to wear a peculiar dress. Although there is this rule, there does not seem to be any feeling of disgust entertained against this class, and wives will often follow their leprous husbands into retirement, and continue to cohabit with them. The government of these villages, in Burmah Proper, is a place of great emolument; as there is a great power of extorting money from persons who have any cutaneous disease, on the plea of their leprosy. Leprosy is considered incurable by medicine.

Hydrophobia appears to be known, although I never met with any one who could describe it. In the oath, administered in their solemn courts of justice, the Burman has to say, among other things, "If I speak not truth, let me be subject to all the calamities that are within the body, and all that are without the body; may I be seized with madness, blindness, deafness, leprosy, and hydrophobia; may I be struck with thunderbolts and lightning, and come to sudden death; may I vomit clotted black blood, and suddenly die in the midst of the people."

I am afraid of becoming tedious by going into further detail on these points. It will be perceived that the practice of medicine is empirically good, in so far as symptoms are combated by medicines whose use has been established by experience. The theory to explain the diseases, and the action of remedies, is utterly worthless, and has possibly been framed to accord with the practice, and not from any induction from phenomena.

I will now offer a few remarks upon the practice of surgery and midwifery among the Burmese.

Operative Surgery is almost unknown; and this is the more surprising, as malignant tumours are, I think, rather common, and must have been recognised as highly dangerous. But the Burmese have a great repugnance to use the knife. Abscesses they almost always allow to burst; and they foment them assiduously, in order to bring them quickly forward. I operated a few times among them, but performed only the minor operations, and these were almost always done in opposition to the advice of the sathamars.

Fractures they treat tolerably well with bandages, and means to keep the limb in position. I believe, also, they know how to reduce dislocations, but I never saw them do it.

Their Midwifery is, perhaps, the worst point about their practice; and there is great mortality, both among mothers and children. Labour is allowed to go on undisturbed till the child is born. The placenta is then forcibly detached, and an immense stone is placed immediately over the uterus, to hinder the copious flooding which often occurs. As soon as the bleeding has stopped in some measure, a large ring of fire is kindled round the bed, and kept up for nearly twenty-four hours. The child is not put to the breast, and the unfortunate mother, intensely hot, perspiring at every pore, and with a tremendous pulse, is hardly allowed to drink anything besides hot spicy infusions. I have been allowed to visit women after this tremendous ordeal, and have found them sometimes completely debilitated and exhausted; sometimes in a high state of fever. Many women, in fact, die, but from what form of puerperal or milk fever I could never learn.

It is not, perhaps, fair to charge upon medicine this extraordinary penance which the newly-delivered woman is obliged to pass through; it is, in fact, a religious ceremony, and the ring of fire is intended to scare away the evil spirits, of whom there are multitudes in Burmese mythology, and who would soon injure the woman, and through her the child, if they were able to pass the fiery belt drawn round her.

I have not alluded at all to the practice of charms, although this is very common; not, however, so much among the doctors as among the other laity. All epidemic diseases, such as cholera, small-pox, etc., are referred to the malice of demons, who are propitiated by gifts, invocations, and various curious charms. There is a very singular superstition connected with cholera. This disease is believed to be altogether a punishment for crimes. When the patient dies, his soul is released, and over that the evil spirit has no power; he can, however, seize the dead body, and wreak some mystical indignities upon it. To prevent this, directly the last respiration has been drawn, the friends of the deceased assemble round the corpse, and, with wild gestures, shout out certain sentences which are supposed to scare away the demon hovering over. These shouts are continued until the body has been carried to the place where such ceremonies are performed, and has been burnt. When all traces of humanity have been consumed by the flames, the disappointed demon is supposed to retire discomfited from the field.

I feel that I have already been too prolix on these details. I will occupy the Society only a minute longer, while I allude to the practice of Opium Smoking among the Burmese. Among all the Eastern

nations this practice prevails; and it is curious enough that the name is nearly similar in all nations, however different their origin and manners. Among the Burmese and Malays the name is "afyun", which is the same nearly as the Arabic word "afioon", and the Hindoo "aphion". I have been informed that the Malay term is the original one. Dr. Royle, however, a great authority, thinks they all come from the Greek *οπος*, juice.

Among the Burmese, opium smoking is a luxury; and the rich indulge in it a good deal. They smoke in the same way as the Chinese. The finest opium is made into a watery solution, then slowly evaporated, and the resulting extract rolled into little pills. Each pill is placed in a hole at the side of a pipe, is lighted by the flame of a little silver lamp fed with naphtha, and suffices for three or four inhalations. After several of the grains have been used, the Burman has had enough; it has merely made him lively and active. It has in no wise made him sleepy. This is a curious effect; and it is worthy of remark, if it be always the case, how differently this same drug affects different nations. From a moderate dose, the Chinaman becomes tipsy, or falls into a reverie; the Malay is rendered furious and excited; the Burman is merely slightly roused. It is a common thing, when a Burman has any difficult work to do, for him to take a pipe or two of opium; he then works for six or eight hours with unusual energy and skill, and afterwards falls into a sound and refreshing sleep. In large doses, the effect of opium is the same on people of all nations. They pass first into dreamy reveries, and then into deep sleep, or coma. The Burmese describe these reveries as foretastes of heaven, or what in their mythology corresponds to heaven, *naik-ban*. Opium is too dear to be very much used, and consequently I have never seen among the Burmese the debilitating effects which are said to occur among the Chinese. But, both among the Burmese and the natives of the Malabar Coast, the chewing and smoking hemp has appeared to me more hurtful than opium.

I think that it may be concluded, even from the few observations I have ventured to bring forward, that, although theoretically the science of medicine is at an exceedingly low ebb among the Burmese, yet its practice is not so destitute of a certain degree of reasonableness as we might have supposed. In fact, I have no doubt that much good is really done by the practitioners of medicine; and I am the more confirmed in this opinion, because their treatment is very much trusted to by their countrymen; and I believe when a whole nation has faith in a particular method of treatment, one may feel pretty certain that this method is, to a certain extent, capable of a successful application. Thus, however erroneous may be their pathology, I have some faith in the Pharmacopœia of the Burmese physicians; and I cannot deny them the credit we claim for ourselves, viz., that of being helpers of men, and useful in our day and generation.

13, Harley Street, Cavendish Square, April 1851.

ON THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF THE FUNCTIONAL DISEASES OF THE UTERUS.

By T. SNOW BECK, M.D.Lond., Fellow of the Royal College of Surgeons; Physician to the Farringdon General Dispensary and Lying-in Charity; Secretary to the London Medical Society of Observation.

(Read before the Medical Society of London, March 29, 1851.)

When I decided to draw the attention of the members of this Society to the Functional Diseases of the Uterus, I soon became convinced that only a fraction of the questions which this subject naturally gives rise to could be considered, during the short space of time which is allotted to the reading of a paper; and hence arose a fresh difficulty, viz., the selection of the points most worthy of consideration. After some thought, I have come to the conclusion, that the most practical method of treating the subject will be to take a case which has occurred in practice, to detail the history, symptoms, and treatment, and then to consider what conclusions can be drawn from the facts thus brought forward.

Case. The case is that of a young lady, E. W., aged 26, spinster, who came under my care on October 29, 1850, when she gave the following history of herself.

The catamenia appeared at about sixteen years of age, and were accompanied with much pain at the lower part of the stomach and across the forehead; previous to this time she had "nothing the matter". The catamenia were now absent for twelve months, during which period the health was very delicate. She described herself as looking "very bad", being thin, very languid, and generally obliged to lie down every afternoon; as having a cough, no appetite, pain in the left hypochondrium, and much aching pain in the lumbar region and inside of the thighs. These last symptoms returned every fortnight or three weeks, and continued a day or two; she then "used to be pretty well", but the headache remained every day, more or less. For some months she was under the care of a surgeon, but experienced no relief from the medicines, which, she thinks, were various preparations of steel. Three months after the medicines were discontinued, the catamenia appeared for the second time, and were accompanied with great pain for two or three days. They were of a dark colour, continued nearly a week, and were not followed by any white discharge.

From this time the health was totally changed; she became stout, had much colour, and the spirits were very good. The catamenia appeared every month, within a day or two, accompanied with some headache and slight pain in the lumbar region and inside of the thighs. They were generally of a dark colour, and remained about five days; the quantity was not great, and they were usually followed by a white discharge for one week afterwards. The accompanying pains came on a few hours before the menstrual discharge, and remained for a day or two, gradually becoming less.

For four years she continued in this state of health, running about and dancing a great deal, whether the catamenia were present or not.

She was now attacked with what was termed "bilious fever", which was so severe, that her friends had no hopes of her recovery. It came on with flushes in the face, and great pain in the head; afterwards she was very thirsty, and drank much cold water; she was also very sick, vomiting large quantities of sour fluid, about half a pint three or four times a day, when, after a good deal of straining, a little yellow matter would come up. Great pain was also present in the back, the lower part of the stomach, and all over the thighs, but chiefly in the front and inside. These situations were also very sore if anything touched them, and had the feeling of being bruised or beaten. For three weeks she was unable to leave her bed; and during great part of this time she was delirious. When partly recovered, she left home for change of air, and gradually got about again—that is to say, she got much better. The appetite was very good (she always, indeed, felt hungry, with a sinking and craving at the epigastrium); she gained some flesh, but was never so stout as before; and she always felt wearied and languid, being soon worn out by any slight exertion, and was more subject to headache than before. The catamenia continued regular in recurrence; the accompanying pain about the same; the quantity diminished; the colour became lighter; and the white discharge increased in quantity and in duration.

During more than three years she remained in this, as she considered, delicate state of health, when, eighteen months ago, she was again confined to her bed for three weeks. This illness began, during the catamenial period, by the face being much swollen, and of a dark purplish red; and was attended with cold shiverings, and much fever. As in the former illness, she again had great pain in the lumbar region, at the lower part of the stomach, round the hips, and all down the inside of the thighs. The bowels were not moved for a fortnight, although she took a great quantity of castor oil. She felt very sick, but did not retch much. The medical attendant described the attack as "partly erysipelas", and ordered warm fomentations for the pain in the stomach, which gave some relief. She stated to me that the medicines "did not do any good", but that she gradually got about again, when she felt very weak, the spirits being extremely low. The stomach was so tender that she could not stand upright, but was obliged to walk double; her friends jocularly remarking that "she looked like an old woman after her confinement". It was now told her, that her illness was caused by not taking sufficient exercise; and she was ordered to get out of doors, and to keep the bowels open, for which she had some pills which griped very much. Her health was worse than it had previously been. At one time, however, it so much improved, that she thought it was going to be completely restored, when all the old symptoms returned, and she was just as she had been. After suffering in this way for nearly eighteen months she came to London, and presented the following symptoms.

She was rather tall and thin, with dark hair, dark eyes, swarthy complexion, and medium conformation. The expression was dull, heavy, and depressed; the lips of good colour; but the upper lip was much swollen, and of a dusky red. She felt very weak, faint, and inclined to be hysterical; had lost much flesh lately, particularly in the bosom, and about the upper part of the chest. On the day before I

saw her, she could only sit up for one hour and a half. The least exertion caused fatigue, when drops of cold perspiration would stand on the face, a singing noise be induced in the head, and attended by a great sensation of palpitation; she also had frequent feelings of faintness and sinking during the day. A dull pain was complained of across the forehead, attended with a feeling of tightness, and occasionally a hot heavy pain at the top of the head, at which time the face "feels so hot". The head very often, but not always, felt full, and frequently was much confused. The spirits were very low; she was easily excited, and started much at any noise. She felt rather nervous and irritable, which she tried to overcome; and sometimes she had the feeling as if something dreadful were going to happen to her, which was relieved "if she could cry". The memory was very bad, and much indecision had come on, which was not the natural character. Sometimes she slept pretty well, but had very bad dreams; sometimes she "could not sleep at all". When she did sleep, she frequently awoke with a start, frightened and perspiring. The eyes felt heavy and aching; the eyesight was dull and impaired. The skin was soft and cool, with some moisture. She always felt chilly, though the face and hands were subject to frequent hot flushes; nor could she bear either heat or cold. The pulse was 108, regular, rather small, and soft; no venous murmurs were heard. The tongue was rather large, pitted at the edges, which, as well as the under surface, were of a red colour; the centre being covered with a dirty white fur. She had a very unpleasant bitter and sour taste in the mouth, much thirst, and no appetite. She had not taken meat for the last month. Sometimes a sinking at the chest was felt, as if she wanted something, yet could not eat. There was no pain nor distension after taking food; but the stomach sometimes swelled very much, chiefly in the evening, before going to bed. The bowels were at the time confined; sometimes they were regular. The urine was pale, and in considerable quantity; at other times it was darker, less in quantity, thick, and deposited a red sediment on standing. Much complaint was made of a constant pain in the lumbar region, shooting up as high as the middle of the dorsal region. From the lumbar region it extended round the hips, and was most severe in the iliac regions, extending from thence to the hypogastrium, the groins, and the anterior part and inside of the thighs, which latter parts were very sore. The pain did not extend below the knees. From the upper lumbar region, pain also extended round the upper part of the abdomen, below the epigastrium. "A distinct pain" also existed in the sacral region, and extended round the glutæi muscles, and down the outside of the thighs, as far as the knees. The pain in the sacral region produced a feeling as if the back was broken, or as if she "wanted something to bind it up". For two days lately she had been lame in one leg, and could not walk across the room; she described this as not having power over the leg to stand, and feeling that the inability came from, or was connected with, the sacral pain. It came suddenly, and went away suddenly, in the night during sleep. She was always obliged to be very careful on sitting down, as this hurt her, giving the feeling of sitting upon some tender body. When the bowels were moved, great pain was felt, as if the motion passed over a tender substance deep in the pelvis, whilst a distinct pain was

felt at the anus. The pains extended up the back, and round the lower part of the stomach, and were not always equally severe. The catamenia were irregular in recurrence (six or seven weeks, and sometimes three months), and were accompanied by a great aggravation of all the pains described; they continued not more than two days, were very pale, and were followed by a great quantity of yellow discharge, which was constantly present.

On local examination, the vagina was found narrowed by the strong contraction of the muscles of the perinæum. It was hot, tender, swollen, and velvety to the feel; whilst the arteries, along its walls, were felt to pulsate strong and full. Passing the finger up to the uterus, this organ was found to be low, and somewhat behind the perineal muscles. It was very tender to pressure, hot, and swollen, having a somewhat soft and distended feel. The lips were smooth, with a well marked velvety surface, the orifice nearly natural, the neck enlarged, and surrounded by mucous membrane lying in circular folds; whilst the pulsation of the arteries was strong and quick. As no impediment was offered, by the existence of a marked hymen, to the introduction of a small speculum, this instrument was passed up to the uterus, when the lips were found somewhat enlarged, perfectly smooth, of a dusky brick red, and without a trace of abrasion or of ulceration. The mucous membrane of the vagina was of a similar, but deeper, dusky brick red colour. Some purulent matter entered the instrument.

Six leeches were applied to the anterior part of the uterus, and directions were left to encourage the bleeding to about half a pint. A saline diaphoretic mixture was directed to be taken three times a day, the warm hip-bath to be used for a quarter of an hour each night, and perfect rest to be maintained.

Nov. 1. The leech-bites had bled freely, and caused a faint weak feeling, but the pains were very much relieved, and more benefit had been experienced than from any means yet employed. Pulse 100, regular, and soft. The head felt rather light, but clearer. She was less nervous, and felt better. She was desired to continue the remedies.

Nov. 8. She continued improving; the vagina was much less tender, not so hot, and the arteries beat with less force and quickness. The surface was lubricated with a fluid, which was oily-like to the finger. The uterus was less tender and swollen, and the arteries beat with diminished force. In walking from the bed to the fire she staggered, yet expressed herself as being much better. The leeches were again applied; a pill, containing two grains each of blue pill and extract of henbane, was ordered to be taken each night, and a lotion of decoction of poppies and acetate of lead to be used twice a day.

Nov. 15. Reported herself as much better in every respect. The pains were all lessened; the discharge, though still yellow, was not so great. She slept better, though still annoyed by very unpleasant dreams; the appetite was much the same, the general strength much improved, so that she could now walk about with considerable ease.

Nov. 26. She had had an increase of the pain, in consequence of exerting herself more than usual, in order to assist in nursing her sister's children, who had been attacked with typhoid fever. The local tenderness and swelling of the vagina continued to diminish, as did also the force in the pulsation of the arteries. The uterus was still

rather tender, slightly enlarged, and rather firm to the feel; but the pulsation of the arteries was only perceptible on the left side, where they beat quickly, but were small in volume. Pressure upon this part increased the pain in the left iliac region, and in the stomach and lumbar region. The leeches were again applied, and rest enjoined; and she was directed to continue the other remedies.

Dec. 3. The catamenia appeared yesterday, the accompanying pain being nothing to what it had been. They were high coloured, and yet not inclined to black: the quantity not great In every other respect, she was very much improved. The leeches were repeated the day after the cessation of the catamenia, and the other remedies were continued.

Jan. 3. The catamenia appeared two days ago, with so little inconvenience, that it might be said she had no pain; she considerd herself quite well, and was most anxious to return to the country. She had gained flesh, slept soundly and well; the spirits and appetite were good; the bowels rather confined, the memory much improved, the head clear. At her earnest solicitation, she was allowed to return home, with strict injunctions to continue the warm hip baths, once or twice a week for a time; to rest a little each afternoon, and to take a saline bitter tonic twice a day.

Feb. 28. I received a communication from her, in which she said that she considered her health perfectly restored, and had gradually ceased to use the bath and the medicine.

Remarks. On glancing over the previous history of this case, it is evident that, at the age of sixteen, the patient having been previously in good health, an unusual degree of congestion of the uterus accompanied the commencement of the menstrual function. After the disappearance of the catamenia, the accompanying congestion remained, as was shown by the languor, want of appetite, pain at the hypochondrium, and the aching pain in the lumbar region, and inside of the thighs; and this affected the general health. A surgeon, misled, we may suppose, by that delusive system of considering a symptom of a disease as the disease itself, considered the disorder to be amenorrhœa attended with debility, and administered steel remedies, in order to procure the regular recurrence of the catamenia. This was not successful; nor is it likely that it should be, for, although iron is eminently efficient in removing that state of the blood upon which anæmia and chlorosis depends, it is most injurious when administered during congestion or chronic inflammation of the uterus, acting as it does, as a direct stimulant of the uterine organs, and hence perpetuating these morbid states. Did it in this case produce such an effect? Although I am not in a position to give a decided answer to this question, yet the probability is that it did; and that, when the actions of nature were no longer interfered with, they, to a certain extent, recovered their healthy condition. Three months after the remedies were discontinued, the catamenia appeared for the second time; though the uterus was still labouring under an undue congestion; as evinced by the great pain which accompanied menstruation, and by the dark colour of the discharge; and there was now also congestion of the vagina, as shown by the white mucous discharge.

From this period the health greatly improved, and for four years continued good; yet the original congestion of the uterine organs re-

mained, as is proved by the pains which attended menstruation, the dark colour of the blood, and the subsequent white discharge. She was now attacked with what was called "bilious fever", but which was, really, inflammation of the uterus. The symptoms which prove this were: great pain in the lumbar region, at the lower part of the stomach, and the front and inside of the thighs, delirium, great pain in the head, and sickness, attended with much straining, and vomiting of large quantities of sour fluid. How far this attack was to be attributed to the imprudent course of running about and dancing, which she was permitted to follow, I will not stop to inquire, but will only say that probably this was the cause. From this attack she partially recovered, with the uterine congestion more marked than before, and the general health in a shattered condition.

For three subsequent years the health remained in this state, when she suffered from another attack of inflammation of the uterus, of less severity than the former. This is shown by the cold shivering and the fever; the pains in the lumbar region, lower part of the stomach, and inside of the thighs; and the constipation of the bowels. No relief appears to have been obtained from the remedies employed; but she again got about, bearing the evident marks of serious uterine disturbance—great general weakness, depression of spirits, and inability to stand upright in consequence of the tenderness of the stomach, and the general appearance, which caused the jocular remark of her friends, "that she looked like an old woman after her confinement".

Symptoms. The symptoms, of uterine disease, such as were presented by my patient when she came under observation, may for convenience be divided into groups—direct, constitutional, and local.

In the group of *direct symptoms*, or those which arose directly from the disease itself, we may place, the pains in various parts of the body, the condition of the menstrual function, and the vaginal discharge.

The pains which were present in this case, were pains in the lumbar region, shooting up to the lower dorsal, and extending round the hips, across the sides of the abdomen, towards and into the hypogastric region, the groins, the anterior and inside of the thighs; also extending from the upper lumbar region round the upper part of the abdomen. At the same time, to use the patient's own words, "a distinct pain", giving the feeling as if the back "wanted something to bind it up", existed in the sacral region, extending round the glutei muscles, and down the outside of the thighs as far as the knees. Can any answer be given to the question—Why are the pains found in these situations? Will the anatomy of the nervous system of the uterus afford any clue to the explanation?

It has been pointed out that the portion of the nervous system, called the sympathetic, consists in reality of an admixture of the true sympathetic—the gelatinous fibre,—and of branches of spinal nerves—the tubular fibre;—and that by this means the various viscera have distributed to them branches from the cerebro-spinal system. It has also been shewn that, in addition to the nerves coming from the lumbar plexus, and distributed to the muscles and skin of the lumbar region, the muscles and skin of the abdomen, and the muscles and skin of the anterior and inner part of the thighs, nerves, likewise de-

rived from this plexus, are distributed to the lower portion of the uterus, through the medium of the hypogastric plexus. The organ is thus placed in direct relation with the nerves coming from the lumbar plexus, by means of the branches of spinal nerves, which are derived from the same plexus, and distributed to this organ. Now, bearing these facts in mind, and remembering that alterations of sensation may be reflected through the spinal cord, in the same manner as motor actions, we have a beautiful and scientific explanation why, in this case, in which the uterus is affected, the pains are felt in the parts supplied by the nerves derived from the lumbar plexus,—to wit, in the lumbar region, the sides of the abdomen, and the thighs. This, however, explains but a portion of the pains which were present. Another distinct class were seated in the sacral region, and extending from thence to the posterior part of the thighs. How are these to be accounted for? If we again turn to the anatomy, we find that the nerves which supply the vagina are not derived from the lumbar plexus, but come from the sacral plexus, which likewise supplies the skin and muscles of the sacral region, of the hips, of the perinæum, and of the posterior part of the thighs. Again, bearing these facts in mind, and remembering that sensory impressions derived from the vagina are reflected along the nerves derived from the same plexus as furnishes the vaginal nerves, we have an equally satisfactory explanation why, in the inflammation of the vagina, here present, the pains should be seated in the situations in which they were found.

As the consideration of these hitherto inexplicable pains is of great importance, as a means by which uterine affections may be distinguished from other diseases, and also as a means of diagnosing, whether the uterine affection be seated in the vagina, or in the uterus, or in both organs combined, or in the ovary, I may be allowed to make a short digression from the strict consideration of the case before us. It has been stated, that when the vagina is affected, the pains are reflected along the course of the nerves derived from the sacral plexus, and that when the lower part of the uterus is the seat of the disease, the pains are felt in the parts supplied by nerves from the lumbar plexus; both which statements are illustrated by the present case. But suppose the body of the uterus be the seat of the disease, where then are we to look for the pains which will be induced? Let us again turn to the anatomy, and see what that teaches. It informs us that the spinal nerves, which are distributed to the upper part of the uterus, are supplied by the intercostal nerves, branches from which pass inwards over the thoracic sympathetic, and join together to form the splanchnic nerves; and that the fibres which compose the splanchnic nerves traverse the semilunar ganglia, and contribute to the formation of the superior aortic plexus, from which the upper part of the uterus is supplied by nerves. From these data, we would expect, when the body of the uterus is the seat of disease, that the reflected pains would be found along the course of the intercostal nerves. And such is the fact. Did time permit, I could submit different clinical observations in support of this *à priori* conclusion; wherein most severe and obstinate pains, traversing the course of the intercostal nerves, and chiefly seated over one or both hypochondria, were found to depend upon inflammation of the fundus uteri, and

were immediately relieved by the application of a few leeches to the upper part of the neck of the uterus, that being the nearest available point to the seat of the disease.

It must not be supposed, that in every case the pains will be reflected along all the nerves which are in relation with the organ which is affected. In severe cases, such is the fact; but in less marked cases, one or two only of the nerves may be affected, or the pain may be chiefly confined to the terminal branches of distribution, producing an ill defined pain over a particular region of the body. Yet at all times, the principles which have been stated will materially facilitate the just appreciation, if they do not afford the means of an absolute diagnosis, of a large proportion of pains which are well known to accompany uterine disease, but of which no explanation has yet been given.

To return now to the present subject. Although the menstrual function and the vaginal discharge are in many cases, as in this, important signs of the condition of the uterine organs, yet nothing, it appears to me, has tended more to retard the scientific advance of uterine pathology than retaining, even to the present day, the artificial division of uterine affections, founded on the alterations of these functions. This is the more to be regretted, as the menstrual function is in no wise an indication of the nature of the disease which exists. In this case it was established at sixteen, and subsequently suppressed for twelve months, then to be re-established with regularity. And although the health was said, at this time, to be very good, yet, had attention been paid to the accompanying pain, the dark colour of the flow, and the subsequent white vaginal discharge, it would have been evident that a degree of congestion remained, which required but some want of attention to fan it into an attack of inflammation—a state of things which actually occurred. After this attack, the menstrual function, though regular in recurrence, still indicated that the original congestion remained;—but it indicated more: for it gave evidence, by the lighter colour of the flow, that the general health was suffering. At a later period, the great aggravation of the accompanying pain, and the continuous yellow discharge, were indices of inflammatory action in the uterus and vagina; whilst the irregularity of the recurrence of the catamenia, the diminished period of their flow, and the very pale colour they assumed, too clearly indicated the great influence which the continued suffering had produced upon the general health. It is worthy of remark, that the mucous and purulent discharges which accompany these cases are formed by the vagina, and do not in any way indicate the condition of the uterus, which may be seriously affected without any vaginal implication, and hence without any accompanying discharge.

The *constitutional symptoms* indicate that the digestive system, the nervous system, and the general health are affected; but they likewise show a great immunity of the respiratory and circulating systems. The disorder of the digestive system is marked by the œdematous and furred tongue, the disagreeable taste in the mouth, the want of appetite, the sinking at the epigastrium, the distension of the stomach in the evening, and the alternating condition of the bowels and urine. But these conditions do not indicate so marked a derangement of this system, as appears necessary to produce the disorder of the nervous

system and general health which is likewise present, and hence cannot be considered as the cause of the illness, but must be looked upon as one of the consequences of some other cause, which produces in like manner the disturbance in the other systems. An attempt has been made to connect the alternating conditions of the urinary secretion with a mal-assimilation of the food, and hence to use this secretion as a sign of the treatment required. In this, however, I cannot agree. The regular action of the kidneys is apparently disturbed by the same cause which disturbs or disorders the other organs of digestion. This is shown by the state of the urine varying in the same ratio as the original disease varies. When the pains in other parts of the body become intensified, indicating an aggravation of the uterine disorder, whether this be caused by the congestion which accompanies the catamenia, or from an increase in the disease, the urine becomes deeper coloured, scanty, thick from the deposit of lithates, and requires to be voided more frequently than before. But when the opposite state prevails, and the uterine affection is improved, the urine then becomes abundant, clear, and pale. These alternations are frequently observed during the course of these affections, and take place when the same course of diet has been continued throughout the variations. There can be little doubt that an improper diet, taken while the digestion is already impaired, will increase this disorder; but still this is not the original cause of the disturbance in the urinary functions.

The disorders of the nervous system are by far the most apparent. The various reflex pains which have been already considered, and which continually harass the patient, belong to this class of symptoms. In addition, we have pain across the forehead, and at the top of the head, with fulness, and occasional confusion of ideas; also loss of memory, depression of spirits, increased excitability and irritability of the nervous system, restless nights, harassed by frightful dreams, and impaired eyesight. Another condition of the nervous system, which is only indicated in this case, is one of great interest, and one which I hope to take up at some future opportunity. I allude to the fact of the sudden loss of power over one leg, and the sudden regaining of this power whilst asleep. I have met with some well marked cases of this description, where the patient had been treated for diseased spine, in consequence of the peculiar pain present in the sacral region. In some, a complete paraplegia existed in regard to the motor power, whilst the sensation was not perceptibly altered from that of health; in others, an incomplete hemiplegia existed. In all, the paralysis passed away as the uterine disease, which apparently produced it, was gradually cured, and the health regained its tone.

The evidence of the impairment of the general health is found in the loss of flesh—particularly marked about the chest, and especially at the bosom—and the increased frequency of the pulse. In this case we may also add the general weakness and languor, together with inability for exertion, which, when attempted, was followed by cold perspiration, singing in the ears, and beating of the heart. It does not, however, appear that we can in all cases attribute these latter symptoms to derangement of the general health; for they occur too early in the course of the disease for this explanation to be admitted; and further, the marked manner in which they are often connected

with the appearance of the catamenia, shows that the condition of the uterus, acting on the nervous system, is sufficient to produce them.

In casting a retrospect over the constitutional symptoms present in this case, we find that the nervous system was especially affected, and that this was attended by disorder of the digestive system. How is this to be accounted for? Will the anatomy and physiology, of which so much use has been made, assist in this explanation? I think it will. In addition to the anatomy of the nervous system affording a beautiful explanation of the various pains which accompany uterine disease, it further teaches, that the viscera of the abdomen are supplied by spinal nerves from the same nerves or plexuses which furnish branches to the uterus, *i. e.*, the dorsal and the lumbar nerves. These nerves send branches inwards, which become mingled with the gelatinous fibres of the sympathetic, and are distributed in company with them to the various viscera. With these anatomical facts before us, and with the knowledge that pains are reflected along the nerves supplied from the lumbar and intercostal nerves to the back, to the walls of the chest and abdomen, and to the thighs, we have a fair reason to infer that similar pains will be reflected along the branches furnished from these same nerves and distributed to the viscera.

This inference acquires additional confirmation from the "working" frequently felt in the bowels, and the tenderness of them which is present, independent of the tenderness in the abdominal walls. If this reasoning be correct, we are enabled to give a satisfactory explanation why the abdominal viscera should be disordered, which clinical experience has taught us is the fact. But is this derangement in the condition of the nerves sufficient to account for the derangement in the functions observed? I submit that it is, and that it affords a sufficient reason why the respiratory and circulating systems should be so little implicated. The nerves, which supply these systems, arise from the spinal cord higher up than the origin of the uterine nerves, and hence are not implicated in the series of reflex actions to which these diseases give rise. It is right, however, to call to remembrance that, in the case under review, the pulse was accelerated, and the heart beat strongly on exertion. These symptoms, however, appear to depend on the state of the general health; for it is well known that, as a rule, the pulse is not increased in frequency, nor is there palpitation of the heart, except when some constitutional state is present at the same time.

The *local symptoms* have been already detailed, and do not require further examination. They afford indisputable evidence of the existence of inflammation of the vagina and of the uterus.

From a short review of the pathology to which the examination of this case has led, we have the following propositions:—

1. The symptoms by which uterine disease is recognised are chiefly referable to derangements in the nervous system; which consist of
   (*a*) Pains reflected from the uterus to various parts of the body.
   (*b*) Irritation of the spinal cord, and its prolongation into the brain, communicated to the various organs through the spinal nerves distributed to the uterus.
2. The reflex pains, which have so much puzzled the physiologist

and the pathologist, are beautifully explained by attention to the anatomy of this portion of the nervous system.

3. Next to the nervous system, the organs seated in the abdomen are those which are chiefly implicated in the derangement.

4. The derangement of these abdominal organs may be explained by the irritation of the uterine nerves being reflected through the spinal cord, along the spinal nerves distributed to these organs, which nerves arise from the same part of the spinal cord as the uterine nerves.

5. The respiratory and circulating systems do not suffer from uterine disease, until this disease has existed a sufficient length of time to derange the general nervous system, or the general health.

6. The immunity of these systems may be explained from the fact, that the nerves, which are distributed to them, arise from the spinal cord, or its prolongations, higher up than the uterine nerves, and are, hence, not implicated in the reflex phenomena which exist.

7. The general health finally becomes implicated by the want of appetite, the deranged digestion, the want of sleep, the little which is gained being disturbed by frightful dreams; and by the constant state of irritation and pain which the patient habitually suffers, and which is greatly increased for several days, at each catamenial period.

8. And, as a corollary to these propositions, I may add that, when we remember that the organ under consideration is destined to have a periodic afflux of blood to it, to take on greatly increased arterial action, and to undergo wonderful enlargement as a physiological condition, all apparently designed by nature to occur without implicating the general health of the female;—we have a reasonable explanation why the diseases of this organ should affect the general system so little as they do.

Diagnosis. It is necessary to consider the diagnosis apart from the local symptoms, as it is important to establish it, before submitting the patient to a local examination.

From *Anæmia*. The symptoms which favour the idea of this disease being present are, the general weakness, the languor, and inability to exertion; the latter being followed by perspirations, singing in the ears, and beating of the heart; also the lowness of spirits, the nervous excitability, and the irregularity and pale colour of the catamenia. But the symptoms which contraindicate it are sufficiently well marked; they are the complexion, the red colour of the lips and mucous membrane of the mouth, the character of the pulse, and the absence of venous murmurs, or arterial whiffs: whilst the nervous irritability which is present, the pain in the head, the sleepless nights and frightful dreams, the pains in the back, abdomen, and thighs, the great pain attending the catamenia, and the yellow vaginal discharge, all too clearly point to the uterus as the organ chiefly implicated. I am aware that, in this appreciation of the symptoms, I may differ from some of our most esteemed authors; yet I feel assured that, in the description usually given of anæmia, authors have included symptoms which properly belong to functional diseases of the uterus, in consequence of these two affections being, not unfrequently, met with combined in the same individual. The state of health which is produced by the functional diseases of the uterus, is, however, very distinct from that of anæmia, though frequently confounded with it.

From *Rheumatism*, the diagnosis presents some difficulties. The aspect of the patient, the state of the digestion, the condition of the urine, which is high coloured, and depositing lithates, and the seat of the pains, might mislead. For we must remember, that the pains which accompany uterine diseases are seated in the nerves which supply the muscles of the back, abdomen, and lower extremities, and consequently might readily be mistaken for pains seated in the muscles themselves, especially as they are aggravated by the action of these muscles. But the exact seat of the pains, the course which they pursue, their aggravation during a catamenial period, the varying condition of the uterus, the disturbed state of the nervous system, and the general condition of the patient, aided by the previous history, will suffice for a correct diagnosis. Some authors consider that some functional diseases of the uterus essentially depend upon a rheumatic condition of the system, present at the time; and certainly the relief which is sometimes obtained by rheumatic remedies favours this view; but how far this may be accidental, and not essential, I am not prepared to say.

From *Disorders of the Digestive System*, this case offers little doubt in the diagnosis. The digestion was certainly disordered, but the disorder bore no relation to the general derangement which was present. In some cases which are attended by obstinate constipation of the bowels, with frequent sickness, and great pain in the forehead, as a sequence of this constipation, the diagnosis becomes difficult, especially from the reflected pains from the digestive organs being seated in much the same situation as the reflected pains from the uterus. The reason for this is obvious, on reflecting that the spinal nerves distributed to these organs are derived from the same part of the spinal cord. However, a careful consideration of the history and symptoms will suffice to form a diagnosis.

From *Disease of the Kidneys* there could be little hesitation in forming the diagnosis. The only disease with which the uterine affection was likely to be confounded, was pyelitis; but as this disease is generally confined to one kidney at one time, and as the pain in this case existed equally in both lumbar regions, the chances were greatly against the existence of this affection. However, I have known a similar affection of the uterus mistaken for a pyelitic attack. The circumstances which led to this error were, pain over the region of the kidneys, chiefly confined to one side, and increased on pressure; pain shooting down the side of the abdomen, simulating the course of the ureter; pain in the inside of the thigh; the urine being acid, containing pus-globules, and occasionally being impregnated with blood-discs and albumen. But on a careful examination of the symptoms, these errors were readily detected. The pain was not exactly over the seat of the kidney; it was more superficial, being evidently reached before the pressure could have affected this organ; it was likewise not present on pressing the kidney from the abdomen. The pain in the course of the ureter was also seated in the walls of the abdomen; the mixture of pus-globules with the urine was detected to arise from the purulent vaginal discharge, whilst the occasional presence of blood and albumen was derived from the same source during the presence of the catamenia. By attention to these points, the diagnosis was soon established.

It is far from unfrequent for the pains present in uterine affections to lead to the belief of the existence of *Ovaritis*, in consequence of pain over the seat of the ovary, which is increased under pressure, and attended with the occasional drawing up of the muscles of the abdomen, so as to simulate a swelling. However, attention to the course of this pain will show that it comes from the lumbar region downwards and forwards to this part; that, upon moving the skin over the muscles beneath, the pain is recognised to be seated in these muscles, and hence is increased by pressure before this can have affected the organs deep in the pelvis. Nay, further, it often happens, that upon gentle pressure great pain is felt, but on increasing this pressure and carrying it deep into the pelvis, little or no pain is complained of. The pain is occasioned by the pressure on the abdominal walls, and its severity, like that of most nervous pains, passes off from a continuance of the pressure. It is, however, very distinctive of the ovary not being the seat of the disease.

What is the diagnosis between this disease and "*inflammation and ulceration of the neck of the uterus in the virgin female*"? On referring to the symptoms of ulceration, as detailed by Dr. Henry Bennet, we recognise, in the description which he gives, the same symptoms which existed in the present case. He states that these symptoms indicate ulceration; yet, in the case under consideration, no ulceration was present. Here then is a marked discrepancy. This case, in itself, is sufficient to shew that the symptoms, which are given as indicative of ulceration, do not indicate this morbid lesion, inasmuch as they here existed in a marked degree, and yet not a trace of ulceration was to be found. Too much, however, has been written on this subject to allow it to be discussed in this incidental manner. It would occupy more time than can at present be devoted to it; yet I may state, that there is not sufficient evidence before the profession to prove the existence of this morbid condition in the virgin female, and that the statements, which have been made respecting it, contain serious fallacies and errors.

Treatment. The eminent success which attended the treatment adopted in this case, is the best proof that it was the correct plan. It also satisfactorily proves, that chronic inflammation of the uterus and vagina will produce great languor and depression of the general system, loss of flesh, pain and fulness of the head, great disturbance of the nervous system, and disorder of the digestive organs; and that all these symptoms will pass away when the local cause which produces them is removed. For, under the influence of mild antiphlogistic remedies, directed to overcome the local disease, all these morbid signs passed away, and the patient gained flesh, lost the languor and depression, recovered her natural spirits, the power of sleeping soundly, and the appetite; in a word, was restored to better health than she had had for years. It would, however, be conveying a very erroneous impression, were it supposed that all cases yield thus readily to treatment. In many, the original disease has continued a sufficient length of time to impress a functional change on the nervous system; and this change will remain after the local disease, which produced it, has been removed. These are troublesome cases, and

require gentle narcotics with general tonics, and attention to the mental condition of the female. At other times, chronic inflammation is combined with an anæmic condition of the system, which constitutes a distressing combination. For, on the one hand, depressing remedies are required to subdue the local disease, and yet are contraindicated by the condition of the general system; whilst, on the other hand, the chalybeates, requisite to restore the condition of the blood, perpetuate and aggravate the local inflammation.

In the case under consideration, the application of leeches to the uterus itself was resorted to immediately. This was done in consequence of the long continuance of the disease, the severity of the pains, indicating a considerable degree of inflammation, and the general aspect of the patient, which conveyed the impression that local remedies were required in addition to the constitutional treatment. However, in the majority of cases with which I meet in practice, the local application of remedies is not required, as the disease yields, in a short time, to mild narcotics, combined with small doses of blue pill, or grey powder, at bed-time; giving, during the day, alkalies, with hydrocyanic acid, in a bitter infusion; these remedies being aided by rest, and the occasional warm hip-bath before going to bed. In a large number of cases it is even unnecessary to recommend the use of lotions, which are particularly objectionable to the virgin female. The application of a few leeches to the perinæum, after the appearance of the catamenia, followed by a warm hip bath, is a very efficient means of combating the local determination of blood in chronic inflammation of the uterus and vagina, combined with congestion of the veins of the pelvis; a condition of things not unfrequently met with.

The plan of treatment which consists in giving stimulating remedies to "bring on", as the phrase is, the catamenia, whilst narcotics are administered to relieve the pain which this treatment induces, is much to be reprobated, as being the means of perpetuating the disease. It is very true that, in many cases, similar remedies, aided or not by a change of air, will restore the debilitated constitution, and, by removing some of the effects of the disease, lead to the delusive hope that the disease itself is cured. But, unfortunately, after a little time the good effect of this treatment passes away, and the patient returns to the condition in which she was previous to this plan being adopted. It is, obviously, beginning at the wrong end. Another plan of treatment, which consists in considering the reddened mucous membrane of the lips of the uterus as an ulceration, and attempting to cure this by applying nitrate of silver, is so erroneous, and founded on so many false premises, that it is impossible to enter upon the discussion of it at this late period; I only notice it to record my dissent from the erroneous pathology which it includes, and from the improper practice which it inculcates.

9A, Langham Place, March 1851.

OBSERVATIONS ON SOME OF THE COMPLICATIONS OF HERNIA, AND ON OBSTRUCTION OF THE INTESTINE WITHIN THE ABDOMEN.[1]

By R. R. ROBINSON, Esq., M.R.C.S. Eng., late President of the South London Medical Society, and formerly Surgeon to the London Dispensary.

PART FIRST.

OBSERVATIONS ON SOME OF THE COMPLICATIONS OF HERNIA.

I TRUST I need not offer an apology for bringing the following cases before my professional brethren.

Hernia, from the suddenness of its appearance; the dangerous symptoms which may quickly follow; the rapidity with which it may destroy life; the delicacy of the operation which it often requires; the obscurity in which it is sometimes involved; and the beautiful illustration which it affords of the power of our art in arresting the ravages of death—ever has been, and ever will be a subject of deep interest to the surgeon. It is not, however, my intention to enter at large upon the intricate subject of hernia, but merely to offer a few observations upon some of its complications which have fallen under my notice.

I. STRANGULATED HERNIA—APPARENT REDUCTION—SYMPTOMS UNABATED. Cases occasionally occur, in which, after an inguinal hernia has been apparently reduced, symptoms of strangulation continue to increase, and lead to a fatal termination. This may be owing to two causes; either to the return of the intestine to the upper part of the inguinal canal, and not into the abdomen,—constriction, therefore, continuing at the internal ring; or to the return of the sac, together with the hernia constricted by it,—hernia reduced *en masse*. Of both of these varieties I am enabled to offer illustrations, for which I am indebted to my friend Mr. Luke.

CASE I. STRANGULATED INGUINAL HERNIA REDUCED EN MASSE—DEATH. A surgeon was called to a case of strangulated hernia, with well marked symptoms. The taxis was applied, the tumour disappeared, and the symptoms subsided, but returned in a few hours, and the patient died. Mr. Luke, who conducted the dissection, found a portion of mortified gut in the upper part of the inguinal canal. The hernia had been returned through the lower ring, together with its sac, at the neck of which the stricture was situated.

CASE II. STRANGULATED INGUINAL HERNIA REDUCED EN MASSE—DEATH. A labourer was admitted into the London Hospital, who was the subject of strangulated hernia. The hernia was relieved by the dresser, and all the symptoms subsided. The man did well. A fortnight afterwards, however, the hernia again descended, and again became strangulated. Upon this occasion the man *forcibly* returned it himself; the symptoms, however, became aggravated, and he died. Dissection showed that the hernia, with its investing sac, had been forced through both rings, the stricture still remaining upon it, and

[1] The substance of two papers read before the Physical Society of Guy's Hospital on March 10, 1849, and January 11, 1851.

seated at the neck. The whole had passed between the peritoneum and abdominal muscles, in a direction towards the bladder.[1]

II. Intestine adherent to the Sac. Where constriction takes place to such an extent as to excite inflammation, albumino-fibrine becomes effused, and a false membrane is formed, by which the intestine is glued to the sac. In these cases, there is very little if any serum secreted, and there is great danger, in operating, of wounding the gut; hence it is highly important to ascertain when this has taken place. Much may be learnt by pinching up the sac prior to opening it. If the sac is not adherent, it will feel thin between the fingers, and the contents will be felt to glide away; if it be adherent, the medium between the fingers will be thicker than can be supposed to arise from sac only, and no gliding will be felt. Cases III and IV, which were operated upon by Mr. Luke, which came under my observation, and which he has kindly permitted me to publish, are cases in point.

Case III. Strangulated Inguinal Hernia on the Right Side—Intestine adherent to the Sac—Operation—Recovery. A pavior, aged 55, subject to pulmonary disease, was admitted into the London Hospital on January 8th, 1828, under Mr. Luke. He had been subject to hernia for three months, but had never worn a truss. It had descended during a severe fit of coughing three days previously, and he had been unable to return it. The hernia was situated in the right groin; it was small, tense, painful on pressure, and devoid of impulse on coughing. Vomiting and hiccup were urgent, but there had been no motion. The warm bath and taxis being unavailing, Mr. Luke performed the operation. After dividing the integuments and some fasciæ, a membrane was brought into view, the nature of which was rendered obscure by numerous vessels running upon it in a circular direction; by pinching up a fold of it, however, between the finger and thumb, a globular body, evidently the intestine, could be felt underneath it. It was, therefore, cautiously opened, and proved to be the sac in a thickened state, having the intestine closely adherent to its interior by bands of recent lymph, which were most numerous, and most thick about its neck. These were carefully separated with the finger. This stricture, which was very tight, and situated at the inner ring, was divided; a knuckle of small intestine (of dark colour, from congested vessels) was returned into the abdomen, and the wound was closed in the usual way. The symptoms gradually subsided, and the recovery was rapid.

Case IV. Strangulated Inguinal Hernia—Circular Direction of the Vessels of the Sac—Adherent Intestine—Operation—Recovery. D. Lazarus, aged 62, was admitted into the London Hospital, under Mr. Luke's care, on the 11th of February 1833. He had been seized, on the 8th, with violent cough, after which

[1] I hesitated much before alluding to this complication, after the able paper upon the subject by Mr. Luke, in the twenty-sixth volume of the *Medico-Chirurgical Transactions*. As, however, these remarks were penned more than fourteen years ago, long before that paper appeared—as I am indebted to Mr. Luke for acknowledging it—as it is a very important complication of hernia—and as, from cases subsequently published by Mr. Luke in the *Medical Gazette*, it would appear not to be so rare as some surgeons suppose, I have thought it best to let it remain as originally written.

he discovered a tumour in the right groin, which soon became painful. Towards evening his food returned; he was frequently sick, and had hiccup occasionally. These symptoms continued unabated at his admission, when a small globular tumour was visible in the right groin which was painful on pressure, but had no impulse on coughing; there were also pain and tension of the abdomen, and the bowels were obstinately constipated. After the usual attempts had been made to return the hernia, without success, the operation was performed by Mr. Luke. The integuments and fasciæ being divided, the sac was exposed. Its vessels were circular, and it had strikingly the appearance of intestine; and it was surrounded by cellular tissue and fat, which had very much the aspect of omentum. When the sac was pinched up, it appeared thick; the gut, upon the most careful examination, could not be felt to glide from underneath it, which led Mr. Luke to express an opinion, that the intestine was adherent. The part of the sac which appeared the *thinnest* was then carefully punctured towards the pubal side, when *one drop* of bloody serum escaped. Upon introducing a director, the intestine was found universally adherent to the sac (except where it had been opened), by red and easily separable adhesions. The very tight stricture having been divided at the internal ring, the gut, a fold of the ileum, in a state of engorgement, was returned into the abdomen. Two hours after the operation the bowels acted, the symptoms soon went off, and nothing untoward occurred.

Remarks. It is difficult to imagine a more embarrassing case than the last of these, or one in which the intestine was more likely to have been wounded, as the usual guides in doubtful cases were entirely absent. The bowel could not be detected when the sac was pinched up; and, had the latter been opened at the *lower* part, the spot usually selected, the gut could hardly have escaped; as the *only drop of fluid* was fortunately placed at the part where the opening was made. Although, upon pinching up the sac, the bowel could not be felt, the precaution was valuable; as I think it probable that it separated the adhesions at that part, and, if so, was instrumental in preserving the intestine from injury.

The *direction* of the vessels has been laid down as a guide to distinguish between the gut and the sac; the vessels of the former, it is said, run in a *circular*, the latter in a *straight* direction. In the cases alluded to above, the vessels of the sac were as circular as those of the intestine; and consequently no assistance was gained from that source.

III. Mortification of the Bowel simulated by the Effects of Tobacco. In some irreducible herniæ, especially in those irreducible from bulk, tobacco enemata have been occasionally used with success. They do not, however, always succeed; and when they fail, are injurious, as they tend to perplex the case, and, by greatly diminishing the powers of life, give rise to the idea that mortification has commenced. This is no mere supposition, but is illustrated by the following case.

Case v. Large long-standing Hernia—Strangulation—Collapse from the Effects of Tobacco—Operation—Reco-

very. A man, aged 55, the subject of hernia thirty years, was admitted into the London Hospital under the late Mr. Headington, the rupture having slipt from under his truss an hour previously. The tumour was large, tense, and painful. He was bled, and was put into a warm bath; by which means syncope was twice produced, but the rupture could not be returned. The pulse was at that time full and hard, and the tongue coated. The tobacco enema was tried, and repeated, after which the pulse became feeble, and his strength prostrated. The taxis was again unsuccessful. While under the tobacco influence, Mr. Headington visited him, thirty-two hours from the descent of the hernia. His countenance was much altered; it was shrunken, pale, and haggard; the pulse was small, fluttering, and intermittent; the tongue brown and dry; there was great thirst, and indifference to surrounding objects; and, although the abdomen was still tense, the tumour was flaccid, and could not be returned. Mr. Headington thought that mortification of the gut had ensued, that the case was hopeless, and that the man was *in articulo mortis*. Mr. Luke, who had witnessed the case throughout, suggested that the prostration did not exist prior to the use of the tobacco, and was referable to it. Upon this suggestion, Mr. Headington performed the operation, and with success.

Remarks. Upon looking to the result of this case, there can be no doubt, although the symptoms much resembled those of mortification of the bowel, that the depression, under which the patient laboured, was owing to the tobacco. Nor can there be any doubt about the propriety of the performance of the operation; yet, had the operator followed his own opinion, he would have left the patient to his fate; the effect of which must have been delay, with the probability of a fatal result.

I may here allude to a case that came under my care some years ago, but the particulars of which have not been preserved, in which mortification of the bowel (in a gentleman, the subject of hernia, just returned invalided from India) was, in some degree, simulated by the collapse of jungle fever. He died, but I had no means of obtaining a *post-mortem* examination.

IV. Passage of Foreign Bodies through an Irreducible Hernia. Although persons, with irreducible hernia, may pass many years without inconvenience, they are, nevertheless, in constant danger, when substances difficult of digestion, and irritating in their nature, are taken into the alimentary canal. A plum-stone, for instance, or more especially the stone of a peach, if accidentally swallowed, might, in such a person, be attended with very serious inconvenience. It is astonishing, however, what miraculous escapes sometimes occur. In proof of this I now refer to the gill-bone of a fish (?) (Fig. 1); it was very hard and sharp, and not only escaped being acted upon by the gastric juice and dissolved, but actually passed through an irreducible inguinal hernia, not only without any injury, but without the patient's knowledge; the first intimation which he had of it being a pricking sensation at the verge of the anus, from whence he withdrew it.

Fig. 1.

Persons, however, are not always so fortunate; for Sir Astley Cooper mentions the case of a boy, aged 13, admitted into St. Thomas's Hospital for irreducible scrotal hernia. He had an accident and swallowed a pin. Five weeks afterwards, the hernia began to swell and be painful. A poultice was applied; an abscess formed and burst, and, at the orifice where pus was discharged, the point of a pin projected; it was easily removed, but a fistulous orifice remained.[1]

V. Descent of the Bowel after Operation. If the hernia has been of long standing, and the rings have, in consequence, become enlarged, the hernia is liable to come down after the operation, and again become strangulated. Thus, in the patient mentioned in Case v, on the tenth day from the operation, the hernia came down, and was attended with pain and vomiting; the man was leeched, and put into the warm bath, when the symptoms went off, and the bowel gradually returned; so that by the thirteenth or fourteenth day it was entirely within the abdomen. On the thirty-ninth day from the operation, when he was convalescent, and about to leave the hospital, the bowel came down more than ever; pain, vomiting, and hiccup immediately supervened. He was again put into the warm bath, and bled to twenty ounces, by which means syncope was induced, and in a few hours the intestine was returned; shortly after which the bowels were opened; the pain, sickness, and hiccup, subsided, and he had no relapse. It is a curious circumstance, that the hernia, twice descending, should each time have threatened strangulation. The first time, as he was purged, its descent was probably owing to the action of the abdominal muscles; but for the second descent, there did not appear any adequate cause, as it occurred while he was sitting quietly in a chair. In another case that came to my knowledge, the strangulation was more complete, the operation was a second time performed, but the case was, notwithstanding, fatal.

Cases of this kind show the necessity for great caution in regulating both the diet and action of the bowels after this operation, and the absolute necessity of perfect rest in the horizontal position. Opium also, as recently advised by Mr. Cock,[2] may, in these instances, be sometimes beneficial.

VI. Double Hernia—Strangulation. It is not, I believe, very common, except in the inguinal regions, for two ruptures to exist in the same individual. A person may, however, be the subject both of an inguinal and of an umbilical hernia. Symptoms of strangulation may occur, and a doubt may arise to which hernia the symptoms are referable. Of this I am enabled, through the kindness of my friend Mr. Luke, to offer an illustration. I will first, however, advert to a case, detailed by Sir Astley Cooper, of a woman, admitted into Guy's Hospital with *three* herniæ; one at the navel, one at the right, and the other at the left groin. The umbilical hernia, and that in the left groin, were irreducible; that at the right groin felt extremely sore on pressure. A doubt arose as to which was the rupture requiring the operation; but, as the symptoms were not very urgent, the opera-

[1] Cooper, Sir A. P., Bart., Treatise on Hernia, Part I, p. 17.
[2] Cock, Edward, Esq., Guy's Hospital Reports, vol. vi, part 1.

tion was delayed. In the mean time the woman died. The tumour in the right groin was found to be an enlarged and inflamed absorbent gland, lying over an empty hernial sac. In the left groin was a portion of inflamed intestine, and at the navel was an irreducible omental hernia, which had suppurated. The intestines were adherent to each other, pus was interposed in some places, and a considerable quantity had been effused into that part of the omentum which was contained in the abdomen. Sir Astley observes, "this woman chiefly complained of pain in the right groin; and, if the operation had been performed, this would have been the tumour laid open".[1]

Case VI. Inguinal and Umbilical Hernia—Strangulation—Operation—Recovery—Sudden Death five weeks afterwards. Mr. Luke was called to a female who was labouring under an inguinal and an umbilical hernia, with symptoms of strangulation. Both ruptures were very tense and painful, both were devoid of impulse on coughing, and both were irreducible. The former was small, and was apparently contained in the inguinal canal; of the two it was the most tense, and could be obscurely felt though a thick layer of fat; he was hence induced to operate upon this one. He found, upon opening the sac, a portion of small intestine tightly strangulated; he divided the stricture, and returned the bowel. Relief followed, the symptoms subsided, and the woman perfectly recovered. While, however, in apparent health, she died suddenly five weeks afterwards.

Remarks. From the success which attended the plan adopted in this case, have we not a guide in future, should strangulation show itself in a person the subject of double hernia? May we not conclude that the hernia, which had existed the longest, and is the most tense, should be the one first subjected to operation. It is possible, however, that the rupture which had existed the longest may *not* be the most tense. In that case, I would be guided by the *tenseness* rather than by the *duration;* for I am inclined to think that, had the duration of the hernia in the preceding case been reversed, the inguinal would have been the one first strangulated, as there is more of tendinous structure, and therefore there is likely to be more compression in this than in the umbilical region.

VII. Unusual Direction of a Hernia. Embarrassment sometimes arises from the peculiar and unusual course which a hernia follows. Thus it is well known, that femoral rupture, by tilting over Poupart's ligament, sometimes simulates inguinal hernia. Inguinal hernia also, when direct, is sometimes placed underneath, sometimes between the spermatic vessels. The peculiarity to which I am about to allude, is not, I believe, generally known; it is the passage of the hernia, after presenting at the internal ring, *upwards* and *outwards* towards the anterior superior spinous process of the ileum, instead of *descending* along the inguinal canal. For a knowledge of this fact, I am again indebted to Mr. Luke. This peculiarity occurred in the preceding case (VI). On exposing the hernial sac, by cutting the tendon of the external oblique, it was observed to proceed from below, upwards and outwards towards the spine of the ilium, contrary to the

[1] Cooper, Sir A. P. Treatise on Hernia, Part I, p. 27.

course of the inguinal canal. From this arose a difficulty in getting at the stricture, which was surmounted by an assistant depressing the gut towards the pubis, and thus exposing the seat of stricture. There was but little difficulty in returning the gut, when the stricture was divided. Mr. Luke also conducted the *post-mortem* examination of a case where the surgeon, after repeated efforts (having opened the sac), had failed to return the gut into the abdomen. The dissection explained the cause of the difficulty. The sac was found, after passing through the internal ring, to pass *upwards between the muscles*, as well as in its usual course through the inguinal canal to the pubis. The internal ring, therefore, might be said to be opposite to the centre of the sac. The embarrassment, then, arose from the gut, when pressed at the pubal extremity of the sac, being received into that which might be called the ilial extremity, instead of being returned through the ring into the abdomen; and, on remission of pressure, returning to its former position at the pubis. From the case not being understood at the time of operation, the hernia remained unreduced.[1]

VIII. Peritonitis coexistent with Hernia. When a hernia becomes strangulated, inflammation is quickly set up in the peritoneal coat of the bowel, and sometimes spreads with rapidity through the entire peritoneum. Peritonitis and hernia are, therefore, very frequently combined. The former, however, is usually subsequent to, and caused by the latter; but it occasionally happens, that peritonitis occurs in a subject of hernia, in which the hernia is in no way implicated as a cause. By the combination of the two, however, much obscurity may arise. Of this we have an illustration in the following case.

Case vii. Reducible Inguinal Hernia on the Left Side—Peritonitis—Ulceration of the Mucous and Muscular Coats of the Bowel—Death. A man, aged 60, after having been exposed to wet and fatigue, and after having been unwell for a fortnight, was seized with rigors at irregular intervals, constipation of the bowels, and pain in the abdomen; but, the day before he came under my care, he had had three motions, which were described as scanty, and pale coloured. He was bled, leeched, and treated with calomel and opium, and aperients. At my second visit, the pain had been somewhat relieved; and, upon close examination, I discovered a tumour in the left groin, which he had never mentioned, but which he now stated to have existed eight years. It was returned easily, and with a gurgling noise, into the abdomen, when gently pressed. The tumour soon reappeared, the symptoms increased in severity, and he died the following day.

On inspection, the tumour in the left groin was found to consist of an old hernial sac, containing a portion of omentum, not gorged, and some serum. There was general peritonitis: about a quart of sero-purulent fluid was found in the abdomen, with flakes of lymph, by which several of the convolutions were glued together. The jejunum

[1] See, upon this point, observations by Mr. Cock in Guy's Hospital Reports, new series, vol. v.

and upper folds of the ileum were very much distended with flatus. Six or eight inches of the latter intestine towards the cæcum were more flaccid than the rest; at one spot, ulceration had taken place through all the coats, but the contents of the gut had been prevented from escaping by adhesion to the surrounding parts, which had, however, become so softened, that yellow fæces escaped upon the least pressure. Several small vascular ulcers were seen in the mucous membrane of the lower part of the ileum.

Remarks. From the facility with which the hernia was reduced, and the entire absence of anything like constriction, either upon the intestine or omentum after death, it is clear that there was no *strangulation*, and that the peritonitis did not arise from that source. I think it was entirely unconnected with the hernia; and, from the patient suffering from rigors, pain in the bowels, constipation, and sickness, as well as from the ulcerated state of the intestinal mucous membrane, I believe that it was of a chronic character, and had been going on for some time.

I should have remained in complete ignorance of the hernia, had I not accurately explored the abdomen. This points out the necessity of doing so in all cases of abdominal inflammation—a custom which I generally adopt. From a conviction, however, that this was a clear case of peritonitis, I did not suspect the hernia, nor detect it until my second visit. The delay was in this case of no consequence; had, however, the peritonitis masked a hernia, it might have been otherwise, and a few hours might have proved very important.[1]

IX. Reducible Hernia in one groin—an Irreducible Tumour in the other—Peritonitis. In the preceding case, the reducible condition of the hernia left no doubt as to the propriety of treatment. The one to which I will now advert was, however, involved in great obscurity, and caused at the time much interest.

Case viii. Reducible Hernia in Left Groin—Irreducible Tumour in Right Groin—Symptoms of Strangulation—no Operation—Death from General Peritonitis. A Welshman, aged 80, was brought into the London Hospital. He was unable to speak a word of English; but, by means of an interpreter, it was ascertained that he had been the subject of herniæ in both groins sixteen years, which were easily reducible. Three weeks before his admission, he perceived a swelling in his right groin, which he could not return. It appeared suddenly, while he was in a passion. Upon examination, a hernia, easily reducible, was detected in the left inguinal region; and in the right groin there was a tumour, the size of a small walnut, circumscribed, unyielding, very hard and painful, the pain being increased on pressure. He had had a slight motion on the morning of admission, but none before that for *three* days, and none before that time for *ten* days. There was no impression made on the tumour by coughing; the abdomen was very tense, and painful on pressure; there was vomiting, which had existed *eighteen* days, and hiccup at times; the countenance was expressive of anxiety, the tongue dry and red,

[1] Vide Case xi.

the pulse small and wiry. Leeches were applied; he was put into the warm bath, and took calomel and opium in small doses, with salts and peppermint. No impression was made upon the tumour, but the bowels were freely opened. A consultation was held: the case was regarded as one of omental hernia, but the bowels having been freely opened was considered as a sufficient reason for not performing any operation. The bowels continued to act; but the vomiting, hiccup, and other symptoms increased, and the patient died fourteen days after admission.

Dissection. The peritoneum covering the abdominal parietes was very much inflamed, as was also that covering the intestines. Four ounces of serous fluid, with flakes of lymph, were found in the cavity of the abdomen. The folds of intestine were glued together by bands of lymph, easily separable. The hernia on the left side had returned, and appeared to have consisted of a portion of the descending colon, part of which was adherent to the internal ring. The tumour on the right side appeared to consist of the remains of an old hernial sac. The fold of peritoneum constituting this sac was very much thickened, and contained a substance resembling cartilage.

Remarks. Was not the peritonitis in this case independent of the hernia? It is clear from the *post-mortem* examination, that an operation could have availed nothing; yet it is questionable, whether the bowels having been opened was a sufficient reason for not operating. It is true that the *bowel* could not have been *completely* obstructed; but the omentum might have been imbedded in the sac, and might have been the cause of the symptoms. An operation in that case might have been attended with benefit. With the exception of constipation, the symptoms of strangulation were strongly marked; there were vomiting, hiccup, tension both of the tumour and abdomen, pain increased on pressure, and a want of impulse on coughing. Under these circumstances, a surgeon would, I think, be justified in examining the nature and state of the tumour.

X. Strangulated Hernia subsequent to Peritonitis. The complication to which I shall next allude, is one of a very distressing and serious nature. It is the occurrence of strangulated hernia, in a person who at a *distant* period had been the subject of general peritonitis, which had terminated by adhesions of the intestinal convolutions. Of this the following is a melancholy example.

Case ix. Strangulated Scrotal Hernia—Former Peritonitis—Operation—Descent of several adherent Convolutions which it was impossible to reduce—Death in twenty-seven hours. In a strong muscular man, aged 44, who had been from birth the subject of hernia, which was easily reducible, but for which he had never worn a truss, the rupture one morning descended, and he could not reduce it; he therefore applied for advice at the London Hospital. There was a large tumour on the right side of the scrotum, very tender to the touch; there was some tension of the abdomen, and he had had no motion for twenty-four hours. He was bled and put into the warm bath, and the taxis and tobacco enemata were tried, but all without avail, and without making any impression on the tumour. The symp-

toms increasing in severity six hours after these means were resorted to, the operation was performed by the late Mr. Harkness. Upon opening the sac, the hernia was found to consist of a fold of small intestine, the surfaces of which were adherent by bands of lymph of long standing. No sooner was the stricture divided (which was principally at the outer, although there was slight constriction at the inner, ring), than fresh convolutions, also adherent, descended, owing to the distended and tympanitic state of the abdomen. Notwithstanding well-directed efforts of twenty minutes' duration, these convolutions could not be returned; and so greatly had the tumour augmented, that the integuments would not cover it; the bowel was therefore protected by lint dipped in oil. Great pain, both of the intestine and abdomen, followed, together with vomiting and hiccup; the gut which protruded became very vascular and thickened, and in some parts covered with false membrane, while, in others, it was even granular. Great depression of the system followed, and the patient died twenty-seven hours after the operation.

Dissection. The passage from the sac to the abdomen was free. The peritoneum generally was highly vascular; the convolutions of the intestines were much congested, very much inflated, and everywhere united together by bands of long standing; four of these united the folds inclosed in the sac.

Remarks. As the hernia was of large size, it would have been much better to have divided the stricture without opening the sac, as advised by several authors, and especially by Petit and Mr. Aston Key, and more recently by Mr. Luke. Had this plan been adopted, it is probable that life would have been preserved; at all events, much distress, both to patient and surgeon, would have been avoided. Had there been, instead of a *large* hernia, only a *slight* protrusion until the stricture had been divided, and the sac opened, and then a fresh descent of the bowel had ensued, which it was found, partly from adhesion of the convolutions, and partly from the tympanitic state of the abdomen, impossible to reduce—what should have been done? The only alternative seems to be puncturing the gut; by this means the flatus would be got rid of, and the bowel so far diminished in size as to allow of its being entirely covered with the integuments, if not passed into the abdomen.

XI. Enlargement of the Inguinal Glands coexistent with Strangulated Femoral Hernia. In femoral hernia, obscurity may arise from enlargement of the inguinal glands. The hernia may become strangulated, and may subsequently return into the abdomen; a tumour and some symptoms of strangulation may nevertheless remain,[1] as in the following case, which was rendered still more embarrassing by other disease.

Case x. Abortion—Uterine Hæmorrhage—Enlargement of the Inguinal Glands—Strangulated Femoral Hernia—Disease of the Stomach and Cholera? I was requested by my

[1] See an interesting case in point by Mr. Else, *Medical Observations and Inquiries*, vol. iv, p. 355.

colleague at the London Dispensary to visit, on July the 14th, 1833, Mrs. M. A., aged 31, who had been admitted as a patient under his care on the 7th, to whom I am indebted for the following particulars. About seven weeks previously, she had miscarried; flooding had supervened, and continued some weeks, but was stopped in two days by rest and sulphuric acid. On the 13th, finding herself quite well, she went out, after which she was seized with incessant vomiting; the matter vomited amounted to *five or six quarts*. It was chiefly a turbid fluid, possessing a strong smell, much like that perceived upon opening the abdomen of subjects recently dead, and annoyed her greatly in passing. She complained of pain across the abdomen, which seized her at very short intervals, and then went off; her pulse was 132 and feeble; her countenance anxious. She had had no motion since the attack. On inquiry, it appeared that she had a small tumour on the inside of the left thigh; it was entirely devoid of pain, and had not the least impulse on coughing; it was very irregular, and had much the feel of an enlarged gland. There was no tension of the abdomen, nor the least abdominal pain on pressure; no hiccup. Her voice had the peculiar sound of cholera, and the depression appeared to me to be of that character. Taking all circumstances into consideration, I was impressed with the idea, that either there was not hernia, or that, if there was, the contents of the sac had returned. I suggested the administration of salts and peppermint water, to which in the evening calomel and opium were added.

On the 15th, we found that the vomiting had continued, and that she had passed neither motion nor urine. Her features were contracted and of lead colour, the fingers bent, the nails blue, the extremities cold, and the pulse imperceptible. It was the decided impression of two physicians who saw her, and of myself, that the case was one of Asiatic cholera. The effervescing mixture, with ammonia, was given, and brandy and spiced beef-tea administered; but all to no purpose, as she died at five o'clock in the afternoon.

Dissection. Putrefaction was fast advancing. The abdomen was very much distended; no flatus, however, escaped upon opening it. The stomach and small intestines, to within the lower third of the ileum, were thickened and very considerably distended with a light drab coloured fluid, which, upon removal, half filled a bucket. The mucous membrane of the stomach was very vascular, and in some parts covered with an apparent false membrane, which separated by maceration. In two places there were large black spots, which at first looked like sloughs; but, upon closer inspection, the membrane did not appear destroyed. It was, however, far from healthy; it was rough, devoid of villi, and in places studded with spots, some of black and others of yellow colour. Upon examining the left groin, there was discovered a small hernial sac devoid of contents, covered by one of the inguinal glands, much larger than common (Fig. 2). Lying just above the inner ring, was a portion of the ileum, about one-third from its termination in the colon; part of the calibre of this was of a deep purple colour, and appeared as if it had been the subject of strangulation (Fig. 4). Below the constricted part, both the small and large intestines were empty. The other abdominal viscera were healthy.

Fig. 2. Shows an inguinal gland enlarged, and lying over the hernial sac.*

Fig. 3. A posterior view of the former preparation, showing the opening of the sac and the femoral vein upon its inside.

Remarks. The first point which attracts attention in the preceding case, is the number of maladies under which the patient laboured, viz.: abortion, uterine hæmorrhage, enlargement of the inguinal glands, femoral hernia, disease of the stomach, and cholera.

We are naturally, in the next place, led to ask, which of these last was the primary affection? In an illness of little more than forty-eight hours' duration, so soon attended with depression of the whole system, it is difficult to solve this question. It is not improbable, that chronic disease of the stomach might have been going on unnoticed for some time, by which perhaps she was rendered more liable, upon exposure, to be attacked by cholera; and that the great straining, which attended the effort to vomit, might have forced down the hernia. The hernial contents—a portion of small intestine—had become in some degree strangulated, as was evident from the engorgement of the intestine at one spot.

It may, in the third place, be asked, whether the intestine was down at the time that I made an examination of the tumour? This it is difficult, if not impossible, to determine. The *post-mortem* examination induced me to think that it was not, and justified, I think, the course which I adopted; the inguinal glands were evidently augmented; the tumour was quite as large after death as before; and the portion of intestine strangulated was found *within* the abdomen, and, although congested, its structure was not at all disorganized. It is, therefore, probable that the constriction was not of long duration.

* The accompanying wood-cuts have been executed by Dr. Westmacott, of King's College, from preparations in my possession.

That this woman was suffering from the influence of cholera, I infer from the *urgency* of the vomiting—the peculiar appearance of the fluid, and the *immense* quantity of it accumulated, with which the greater part of the small intestines was completely filled, notwithstanding the large quantity ejected—the peculiarity of the countenance and voice—the loss of pulse—the scantiness of the urine—the lividity and shrivelled state of the fingers and nails—and the conviction on the minds of three medical men, that such was the nature of the affection. Although diarrhœa, one of its characteristic symptoms, was absent, that does not prevent the disease from being cholera, as I believe that unequivocal cases of cholera have occurred without it; and the constriction upon the intestine sufficiently explains its absence in this case.

Fig. 4. The portion of intestine which had been incarcerated; the dark part representing the degree of engorgement that had taken place.

Since cholera has been raging in this country, it has been observed that many chronic maladies have apparently terminated fatally in cholera collapse. I have related in the *Medical Gazette* a case of long-continued hæmorrhage from the bowels, which was fatal in this way.[1] I have since seen a case of acute gastritis, with slough of the stomach, produced by oil of vitriol, which was attended, previously to death, with many cholera symptoms; and more recently still I have narrated in the same periodical[2] an extraordinary case of abdominal hæmorrhage, which was supposed to have been one of cholera; and I have alluded to a case reported to the Registrar-General as one of spasmodic cholera, but which, upon *post-mortem* examination, proved to have been hæmorrhage into the stomach from rupture of the gastric artery; but I have never before seen symptoms of cholera in conjunction with hernia.

XII. Strangulated Femoral Hernia—Rapid Collapse, supposed to be Cholera. Strangulated hernia, especially occurring in aged people, is frequently unattended with much pain; and is very likely, therefore, unless the surgeon be on his guard, to be overlooked. More than one case of this sort has come to my knowledge; and of this the following is an example.

Case xi. Strangulated Femoral Hernia—very copious Bilious Vomiting—sudden Collapse—Death in Thirteen Hours. A woman, aged 63, very sallow looking, thin and feeble, who had several times been under medical care for severe bilious attacks, accompanied with much exhaustion, and twice for hæmatamesis, sent for a medical man in haste one morning about eight

[1] Medical Gazette, vol. xiv, p. 137.

[2] Ibid. vol. xlii, p. 981.

o'clock. She was apparently quite well the preceding night, and playing at cards in high spirits, although she had had occasional pains in the back and lower part of the abdomen, and felt sick; but these symptoms went off, and she made a hearty supper. She was seized in the night, and again about six in the morning, with violent vomiting, having brought up nearly a chamber-potful of green bile. She was greatly exhausted, sensible, but able to speak *only* in a whisper. The face, particularly the nose, and the hands (especially the right, which she had out of bed), were quite cold. She had cramps in the legs; *no* pain in the abdomen. She had had *one motion the preceding day; and she remarked how regular her bowels had been lately*, and that without medicine. She was naturally of costive habit. No urine had passed. Ten grains of calomel were given immediately; sulphate of magnesia and sesquicarbonate of ammonia, with peppermint-water, were ordered every four hours; fomentations were applied to the calves of the legs, and beef-tea and brandy administered.

At 2 P.M. she had been several times sick; the matter now rejected was said to have been very offensive when passed, but was without smell when shewn to the medical attendant; it was of the colour and consistence of thick gruel, with a reddish-brown tinge. She was in a state of perfect collapse; there was no pulse at the wrist; the nose, face, and hands, particularly that out of bed, were very cold; there were violent cramps in both legs, which were drawn up in knots. A scruple of calomel was given immediately; half a drachm of aromatic spirits of ammonia was ordered to be taken every four hours; friction with mustard was applied to the legs; and the beef-tea and brandy were continued.

At 4 P.M. she seemed decidedly better. She was quite sensible and cheerful; had been sick only once; and had passed some urine, but in no great quantity. The abdomen was not distended, or tender on pressure; her skin, to the hand, was quite cold, although she said that to her it felt warm; there was no pulse at the wrist, but the cramps were gone.

She sank soon afterwards, however, and died at 7 P.M., thirteen hours from her first seizure. Upon finding her dead, the *possibility* of hernia crossed the surgeon's mind, and he examined the groins, when he perceived in the right a swelling of small size, equal, and very tense, pressure making no impression upon it. Upon making inquiry if she had been afflicted with rupture, her friend, who, singularly enough, was the subject of that malady herself, replied in the negative; and said that the patient had often congratulated herself that she was not thus affected. She was a woman of very weak digestion; and it was ascertained that she had lately been eating freely of pork, veal, and rabbit-pie.

DISSECTION, seventy-five hours after death: weather muggy, but cold. Putrefaction was commencing. The tumour was still very tense. Nothing was wrong in the chest. The liver was pale; there was some green bile in the gall-bladder. There was *central contraction of the stomach;* the intestines generally were slightly red; the *spleen* remarkably *small* and *black;* about three drachms of bloody serum were found in the abdomen. A femoral hernia existed on the right side; the stricture embraced very tightly a piece of ileum of the size of a nut.

(Figs. 5 and 6.) This strangulated intestine was of slight red colour; about two feet of ileum, a little above the strictured portion, were very much enlarged and distended, with reddish-brown looking fluid; the mucous membrane here was blackened from venous congestion. The other parts of the small intestines were contracted; the cæcum and colon natural. There was only a drop or two of fluid in the sac, and no effusion of coagulated lymph.

Fig. 5. Represents the small femoral hernia, the sac opened, the intestines congested, the femoral artery and vein with the vena saphena entering it.

Remarks. This case affords scope for many important inquiries. In the first place, it shows the great importance of an accurate examination of the abdomen, in all cases of serious interruption to the function of the gastro-intestinal canal. The surgeon was thrown off his guard, by having so often before attended this patient for biliary derangement. The very large quantity of bilious fluid vomited, clearly shewed that she was bilious now. There was a good deal of cholera in the neighbourhood at the time, and the case had comparatively few of the symptoms of hernia about it. The bowels had been open the previous day; there was neither pain nor tension of the abdomen, and there were symptoms not at all usual in hernia; pains in the back, cramps of the legs, and *copious* vomiting, together with collapse so severe and so rapid that the patient was dead in thirteen hours from the attack. I do not remember to have seen a case of hernia so rapidly fatal; and

patients have often recovered from operation, after strangulation of many days' continuance.[1]

Fig. 6. Exhibits the posterior view of Fig. 5; the intestine is seen entering the sac and firmly strictured by it; also the course of the epigastric artery on the outside of the sac.

Sudden collapse has been so generally associated with cholera, that I feel persuaded that association has led many persons into error, as it did the surgeon in this case. Collapse is owing to a depression of the nerves of organic life; and whatever tends to depress that system, I believe to be capable of producing collapse in no wise different from that produced by cholera. If that impression be correct, it will do much to take from cholera collapse as a diagnostic sign. Although it is to be regretted that the hernia was not detected, I doubt if any thing could have been done to save the patient. The taxis, from the tightness of the stricture even after death, I feel persuaded would never have returned it; and, from the moment she was seen, she was much too weak to have allowed either a warm bath, a tobacco injection, or an operation to have been suggested. Had she been seen earlier, and the hernia then discovered, it is just possible that an operation would have saved her life; although, from the great rapidity of the collapse, the absence of inflammatory action, the comparatively little congested

[1] Sir A. Cooper states, that a case has been fatal eight hours from the first appearance of strangulation, and that an operation has been successfully performed on the eighth day.

state of the intestine strangulated, and the central contraction of the stomach, so often seen in those who die a sudden death, there seems ground for believing that her attack, from its very commencement, was mortal. The state of her spleen was worthy of attention; its small size, and the pale, thin, half nourished appearance that she presented, seem to favour the opinion of those, who believe the function of that organ is concerned in the development of the red globules of the blood.

Conclusions. Having now narrated all the facts which I have to bring forward, it only remains for me, in conclusion, to state the inferences that I have drawn from them, with regard to the occasional complications of hernia.

1. Symptoms of strangulation may continue after a hernia has been apparently reduced—the reduction *en masse*, as it has been called. This may be owing to one of two causes; either to the return of the intestine to the upper part of the inguinal canal, and not into the abdomen, constriction therefore continuing at the internal ring; or to the return of the sac, together with the hernia constricted by it.

2. The intestine may be universally adherent to the sac. It is very important to ascertain this, and much may be learnt by pinching up the sac.

3. The direction of the vessels cannot be relied upon as a distinguishing mark between the intestine and the sac.

4. Mortification of the bowel may be simulated by the effects of tobacco; and, in doubtful cases, an operation ought to be performed.

5. Mortification of the bowel may be simulated, in some degree, by the collapse of jungle fever.

6. Foreign and irritating bodies *may* pass through an *irreducible* hernia without any ill effects.

7. The bowel may redescend after operation, may again become strangulated, and again require operation.

8. Strangulation may occur in a person the subject of double hernia; and a doubt may arise as to which is the hernia requiring operation. In such a case, the hernia that has existed the longest, and is most tense, should be the one first subjected to the knife.

9. A hernia may pass in an unusual direction.

10. Peritonitis may be coexistent with hernia, in cases where the latter is in no way implicated as a cause.

11. There may be a reducible hernia in one groin, an irreducible hernia in the other, and peritonitis.

12. Strangulated hernia may occur subsequently to peritonitis. If this could be known, it would be very desirable not to open the sac; if it be opened, and numerous adherent convolutions descend so as to prevent their being covered by the integuments, the gut should be punctured to diminish its contents.

13. Enlargement of the inguinal glands may be combined with strangulated femoral hernia, and cause great obscurity.

14. Strangulated femoral hernia in old, irritable, and weak persons, may be rapidly fatal from collapse, scarcely, if at all, to be distinguished from that which accompanies malignant cholera.

Camden Row, Camberwell, April 1851.

(To be continued.)

ON THE DIAGNOSIS OF INFLAMMATORY DISEASES OF THE CERVIX UTERI;

AND ON THE USE OF POTASSA FUSA OR POTASSA CUM CALCE IN THEIR TREATMENT.

By J. HENRY BENNET, M.D., late Physician-Accoucheur to the Western General Dispensary, etc.

(Read before the Medical Society of London, April 11, 1851.*)*

It is not my intention in the following paper to enter at length into the consideration of the symptoms of Inflammatory Disease of the Neck of the Uterus, but merely to give a brief and concise analysis of those symptoms, and of those moral rules which guide me in the cases requiring surgical examination and treatment. In the second edition of my work on *Uterine Inflammation*, I have already described the semeiology of these affections at such length, and with so strict an adherence to nature, that it would be mere repetition to do more. Indeed, although I have now had several years' additional experience since it was written, I find that I have but little to add, and nothing to alter.

The discussions which have taken place in this Society during the present session, have painfully convinced me that a less elaborate and more concise statement of the rules which I follow myself, and which I have laid down in the above-mentioned work for the guidance of others, in the diagnosis and treatment of these diseases, is required to justify my practice. My name and authority have been positively appealed to, as a sanction for the surgical scrutiny of the uterine organs of many hundred females who had no uterine disease; and this extensive scrutiny appears only to have led to the discovery of a limited number of instances of disease, so slight as to give way to mere injections and general treatment. Now I must be allowed, before I proceed, most emphatically and most solemnly to repudiate any connexion, as an author or as a practitioner, with such unheard of and such unwarrantable practice. The rules of diagnosis which I have given are meant to lead to the recognition of positive disease, and not to sanction the satisfaction of a morbid curiosity as to the state of organs, which there is no excuse for bringing into view by surgical means, unless we have the conviction that they are the seat of disease, and of disease not to be cured by other than surgical appliances. That the conscientious application of these rules by all practitioners, imbued with a due sense of the great responsibility of their position, does lead, all but invariably, to the recognition of such disease, is proved by my experience, and by that of hosts of talented practitioners, whom I may claim as converts to my views, and whose names I could mention, were it necessary. I may safely say, that I do not make an instrumental examination of the uterine organs once in six months, without finding sufficient disease to justify the step, so careful am I first, by oral inquiry, to be all but certain that disease really exists. Indeed, the mistakes I myself make are generally on the other side; for it not unfrequently occurs, that after treating a patient in vain by general means for several months, without making a surgical examination, on account of the obscurity of the local symp-

toms, I at last find a key to the failure in the existence of local disease, which I did not at first consider myself warranted in looking for. That such will generally be the case I am convinced, however fully the pathological views I defend may be adopted,—at least with all conscientious practitioners, who treat with due respect the females who entrust themselves to their care; and who, acting thus, are as careful and as mindful of the delicacy and the feelings of the patients who come under their notice as claimants on the funds of medical charities, as of those belonging to the higher ranks of society. With a conscientious observance on the part of the profession of those moral scruples which guide surgeons in all painful and repulsive surgical examinations, such, for instance, as that on the bladder for stone, or on the rectum for polypus or fistula, there will be always more risk of uterine disease being overlooked, than of undue interference with the female organisation.

It is for the heads of the profession, for those who take upon themselves to guide their fellow practitioners, to prevent *abuse*, by accepting the legitimate and rational *use* of those surgical modes of exploration and treatment, which modern research has proved to be absolutely necessary to restore the uterine organs to integrity, in a very numerous and distressing class of diseases. This few have as yet done. Some, appealing to their past experience, which, however extensive, is in reality valueless, when brought to bear on newly-developed pathological facts with which they were unacquainted at the time it was gained, have boldly and openly negatived the facts and doctrines I have brought forward; others have attempted to investigate the subject, but, for want of practice in the necessary instrumental explorations, have often failed to detect disease when present,—a circumstance which I am continually seeing exemplified; whilst one or two, by an indiscriminate and senseless abuse of these means of exploration, have fairly exposed themselves to the inculpation of having abused them to an extent of which the records of the profession, either at home or abroad, can afford no parallel. Craving indulgence for these preliminary remarks, I will now proceed to the consideration of the subjects upon which I more especially wish to dwell.

The cervix uteri and its cavity are lined by a mucous membrane, highly organised, and abundantly supplied with mucous follicles, which is very liable to take on inflammatory action, like all other functionally exposed mucous membranes, and to subsequently become the seat of inflammatory ulceration. This important pathological fact, which has only recently been brought to light on the continent by the instrumental exploration of the organ, was not acknowledged or acted upon in this country, when I first drew the attention of the profession to it some years ago. At the same time, its recognition is of the most vital importance to science and humanity, as, in uterine pathology, all is and must remain in inextricable error and confusion, if it be repudiated. The frequency of ulceration in this region, in well marked cases of disease, as compared with other uterine lesions, is, indeed, so great, that out of 243 cases of inflammation of the uterus or its neck, treated by me at the Western General Dispensary, and given at the end of my work, ulceration of the latter part existed in 222. The

explanation of the frequency of ulceration in the cases examined by me is to be found in the facts, firstly, that slight fugitive catarrhal inflammation in this region often no doubt occurs, but without giving rise to sufficiently marked symptoms, local or general, to warrant any kind of local examination at the hands of a really scrupulous observer, such as I trust I may claim to be, and consequently is not often seen by him; and, secondly, that when inflammation does not subside spontaneously, it is aggravated by each successive menstrual congestion,—menstruation feeding uterine inflammation, and exercising a most pernicious influence over it in the great majority of cases; and thus is called into action the peculiar liability to ulceration presented by this mucous membrane. The tendency in this region to the perpetuation of inflammatory and ulcerative disease, when once it has manifested itself, is certainly most remarkable; it is greater even than in the fauces, and impresses upon the inflammatory affections of the cervix and its cavity many of their peculiar characteristics. Indeed, it is owing to the obstinacy, and to the intractable nature of the disease in those cases which alone ought to come under the *eye* of the practitioner, that surgical appliances, and consequently surgical examinations, become necessary.

The symptoms presented by patients suffering from inflammation and inflammatory ulceration of the cervix uteri, may be summarily divided into local and general. The local symptoms are: pains in the lumbo-dorsal, ovarian, and hypogastric regions, and down the thighs, with, in some instances, difficulty of walking; a sensation of bearing down on standing or moving; vaginal discharges; modifications of the menstruation, giving rise to dysmenorrhœa, menorrhagia, or amenorrhœa; constipation or diarrhœa; and irritability of the bladder. The general symptoms are principally dyspeptic, neuralgic, and hysterical conditions; entailing, secondarily, defective general nutrition, and consequent debility and anæmia.

All these symptoms, local and general, have been analysed so minutely in my work on Uterine Inflammation, that it is unnecessary for me to do more than to enumerate them. Were they always combined in each patient, nothing would be easier than the diagnosis of the disease; but such is by no means the case. Sometimes well marked local symptoms of disease will exist for years, without any general reaction, the general functions and health resisting and remaining good. In other instances, with the same amount of disease, there will scarcely be any local evidence of its presence, but the health will fail from the first, the disordered general condition resisting every means of treatment, until the local disease be treated and removed. These are the difficult cases in practice. From the extensive connexion between the nervous system of the uterus and other parts of the sympathetic and cerebro-spinal systems, the general morbid reactions to which disease of the uterus may give rise are protean. There is scarcely an organ in the economy, or any portion of the cerebro-spinal nervous system, which may not be sympathetically affected when uterine disease, and more especially inflammatory ulceration of the cervix, exists. Such being the case, it behoves us, in chronic general derangement of health in the female, not to omit analysing the state of the uterine organs; and, if the general morbid condition prove intractable, not

yielding to those medicinal and hygienic means which, in such conditions, are *habitually successful*, we are warranted in suspecting uterine disease, and in investigating the state of the uterine organs, provided one or more of the local symptoms enumerated be decidedly and constantly present.

If, in obscure cases, these elements of diagnosis are conscientiously and carefully weighed and acted on, without rashness or precipitation, the patient having the benefit of any doubt,—that is, being first treated generally, and by simple local means, such as injections, etc., if the local symptoms are so slight as to render the existence of decided uterine disease dubious,—very few errors of diagnosis will be committed, and very few females will be submitted to surgical examination who are free from disease, or only present such slight morbid conditions as not to require surgical assistance.

Were inflammatory and ulcerative disease of the cervix always limited to the external region of the uterine neck, and were it always discovered and treated before induration and hypertrophy had taken place, and before the ulcerative process had become chronic and confirmed, simple non-surgical means of local treatment, and attention to the general health, would no doubt suffice to cure the greater number of those so affected. But such is very far from being the case. Owing to the frequently obscure nature of the local symptoms, and to the length of time during which the disease may exist before it reacts sensibly on the general health, it has generally long been present when complained of and discovered, and has thus become so deep-seated and confirmed, and has given rise to so many structural changes, that surgical treatment alone can remove it; and hence the unavoidable necessity for the use of the speculum, in aid of treatment as well as of diagnosis. Moreover, there is an important feature in the history of these affections, which would be of itself sufficient to convince the most prejudiced of the necessity of surgical interference, were they to carefully observe nature, and not merely to reason on past experience, which, as I have already stated, is useless when new facts are brought forward. I allude to the circumstance of the inflammatory and ulcerative element, in the immense majority of cases, passing into the os and cervical canal. Owing to this very general extension of disease to a region which is beyond the reach of mere injections, these latter remedies, the only efficient local means of treatment that can be used without instrumental assistance, are, as a general rule, powerless to eradicate the disease. Indeed, we might as well try to cure gonorrhœa in the male by merely washing the gland with medicated lotions.

When properly used, however, injections invariably do a great deal of good; they remove inflammation and congestion of the vulva and vagina, diminish and limit the cervical inflammation, and, in some instances, lead to the healing of the more external and exposed part of the ulcerated surface. If, at the same time, strict attention is paid to the digestive functions, and to the health generally, the patient generally improves; the leucorrhœa, if present, is arrested; she loses many of the symptoms from which she is suffering, or at least they become mitigated; and both she and her medical attendant think that the morbid state is subdued. As soon, however, as the patient is left to herself, the disease, which has only been modified, not cured, begins to regain the

ground it had lost. Each successive menstrual period aggravates the symptoms, and in the course of a few months, the patient finds herself as bad as, or worse than before she was treated. She then, probably, consults some other practitioner, leaving her former attendant in the happy belief that he has cured her.

To resume: the physical examination of the uterine organs may be not only warranted, but rendered necessary by the presence of the local or general symptoms enumerated. If all, or nearly all the local symptoms I have mentioned are present, the case is a model one, respecting the nature of which there can be no doubt; and, as the local lesions are nearly invariably such as to require surgical treatment, the sooner the state of the patient is thoroughly cleared up the better. If one only of the local symptoms is present, but constantly present, and in a marked manner, and general symptoms are met with which do not give way to properly conducted treatment, there is also sufficient reason to suppose that local disease exists to warrant an examination. The mere existence, however, of disordered general health in a female, of dyspeptic and nervous symptoms, of debility and anæmia, is no proof whatever that she is labouring under uterine disease. These conditions may be the sympathetic result of scores of morbid causes and diseases.

The practitioner having thus acquired, by a careful oral analysis of his patient's symptoms, or, if in doubt, by the test of treatment, the conviction that she is labouring under decided uterine disease, what is the next step to be taken? Is she to be at once examined with the speculum? Most undoubtedly, most unquestionably not, until the state of the uterine organs has been ascertained by a digital examination. The condition of the body of the uterus, its size and position, can only be ascertained by the finger; and this may also be considered the best guide as to whether an instrumental examination be required or not. As I have elsewhere stated, when the mucous membrane covering the cervix uteri is ulcerated, the ulceration nearly invariably occupies the circumference of the os into which it dips, and which is more or less patent. Simple inflammation also, passing into the cervical canal, expands and dilates the os. Hence we have a very valuable diagnostic rule, which is now my principal guide as to the necessity for a specular examination. The latter I consider indicated and warranted, whenever the os is sufficiently open to admit the end of the finger. When this is the case, there may be either ulceration requiring local surgical treatment, or inflammation passing into the cervical cavity, which also necessitates surgical appliances. I would likewise add, as requiring instrumental examination, the cases in which the finger detects marked induration and hypertrophy of the cervix. When these latter conditions exist, it is impossible to judge what precise course of treatment is to be followed, unless the diseased parts be brought into view. The open state of the os is a most invaluable guide as to the presence of inflammatory disease, and the fact of its being so ought to be generally known. It is mentioned by Pauly in his edition of *Lisfranc's Lectures*, but has been lost sight of by French writers, and is generally, if not always, only alluded to by them as a physiological condition, which it is not. It is only within the last few years, that I have myself appreciated its great importance as a means of diagnosis. The os uteri, in

the healthy state, is perceptible to the finger as it passes over it, but the finger, or even its tip, does not pass into it; and, if it does, we are warranted in suspecting disease, unless the patient be pregnant, or recently confined, or the uterus be aggrandised by the presence of a fibrous tumour, etc.

When an instrumental examination has been decided on, it must be efficiently made. Whatever speculum may be used, the result cannot be considered satisfactory, unless the entire organ be brought within the field of vision, and unless it be so illuminated by daylight that a speck of dust would be visible, on any part of its surface. If the os be very open also, a bivalve speculum will alone enable the practitioner to correctly examine the state of the parts. By the expansion of its valves, the open lips of the os can be separated so as to allow the eye to penetrate more or less into the cervical canal, especially if, at the same time, these lips are depressed or elevated with the uterine sound. For a practitioner to state that he is never able to bring into view the interior of the cervical canal, with the assistance of the above rules, when the os is morbidly open, is merely to acknowledge his want of surgical dexterity or practice. Such an assertion proves, at the same time, that a host of important lesions must have escaped notice.

The cases for examination having been thus properly selected, and the investigation having been carefully and efficiently carried out, we find that the lesions brought to light are those which characterise subacute and chronic inflammation of mucous membranes in any and every part of the economy, including ulceration, which is found to exist in the great majority of cases. This latter assertion has been contested and even denied, but without any real foundation. Some of those who have taken this position, have done so from positive ignorance; they have attempted to negative facts, the result of extensive and amply corroborated experience, without endeavouring to test those facts. Others, not able to deny the frequent existence of inflammatory lesions in this region, have asserted that these lesions are seldom or never ulcerative, and that they constitute a form of granular inflammation. No one as yet, however, has deigned to give a definition of what this nondescript granular inflammation really is. French pathologists, and myself, following in their footsteps, have described as granular inflammation of the cervix uteri, a morbid state characterised by chronic inflammation of the mucous membrane, and of the mucous follicles with which it is studded, without abrasion or erosion of the epithelium,—in a word, without ulceration. When the cervix presents this form of the disease, the inflamed and hypertrophied follicles stand out prominently, and give to the organ a kind of strawberry appearance. Some of these follicles are occasionally ulcerated, forming small separate aphthous sores; but this is rarely the case.

In common with the continental pathologists who have preceded me in the study of these diseases, I give the name of ulceration to a state characterised by the absence of the epithelium, as the result of a morbid action, and by the presence of erectile granulations, similar to those which cover all granulating sores or wounds healing by the second intention. It is of little importance whether these granulations are so small as to be microscopic, or so large as to be fungous; in both cases the morbid condition is identical; in both cases there is loss of

substance, although there may be no excavated surface or raised margin; although even the granulations may overtop the surrounding surface. Indeed, we see this occurring daily, in all suppurating sores on the skin, as well as in the deeper tissues. That there is loss of substance, becomes evident if a granulating surface like this is submitted to maceration after death, as is seen in a pathological specimen, consisting of the uterus of the young virgin female whose case I have narrated in my work. In the diseased region there is found evident loss of substance, an *excavated* ulceration of the mucous surface surrounding the os. The mucous membrane is absolutely destroyed in some places, and the proper tissue of the cervix underneath neatly dissected out. How it can be said that there is no proof before the profession of inflammatory ulceration of the cervix in the virgin, considering the publicity given to this case, I cannot conceive. Moreover, this case is not mine, but one supplied to me by my late colleague, Mr. Anderson, the senior-surgeon to the Western General Dispensary. I have no hesitation in saying that, in this instance, during life, the evident loss of substance was certainly concealed by the erectile granulations (pus and sanies-secreting), which cover all suppurating sores; and that, consequently, according to the "new pathologists", it would have had to be called a granular inflammation. In the wax model of inflammatory ulceration, the condition during life of such a surface is well demonstrated.[1]

That the views, which I have just explained, agree with the definitions of ulceration given by the most classical writers, will be evident to any one who gives himself the trouble to refer to them. Thus, to cite only two or three authorities, Samuel Cooper says, that "ulceration is the process by which sores or ulcers are produced in animal bodies"; Boyer, that "an ulceration is a solution of continuity of the soft parts, more or less ancient, accompanied by a purulent secretion, and kept up by some local or internal cause"; J. L. Petit, that "an ulceration is a solution of continuity, from which is secreted pus, or a puriform, sanious, or other matter."

With reference to inflammatory ulceration in virgins, I can only repeat what I have stated elsewhere, that I am never without well-marked cases under my care, and that, in the results obtained, these cases are amongst the most satisfactory that I am called upon to treat; young females, to whom life had been a burden for years, and who had lost hope, being frequently restored to robust health. I do not mean to say, for a moment, that such forms of disease are common, but that they exist; and, in large consulting practices, they must be not unfrequently met with. If I have myself seen so many, it is, no doubt, from the circumstance of my having been the first to direct the attention of the medical profession to the existence of such disease. Thence it is, that I am frequently appealed to in cases in which it is suspected. At the same time, I now most emphatically repeat what I stated when I first made my views known: that I consider that a surgical investigation, in such cases, ought to be adopted only as a last resource,—as one that ought not even to be thought of, until every pos-

[1] The diseased uterus, above referred to, and the wax model, were exhibited to the Society.

sible and available means of treatment has been tried, and has failed; and until it is evident that the patient is doomed to hopeless misery, unless the disease, which is known to exist, be brought to light and grappled with. Then, and then only, is the medical attendant authorised to contemplate such a step; and, even then, the responsibility is so great, that, as I have stated, it ought to be shared, and a consultation held, unless the practitioner be himself a consulting accoucheur, and sufficiently confident in his own experience and judgment to assume the entire responsibility of his conduct. This is the advice which I have ever impressed, in all my writings on the subject. I can also most positively say that, although I have treated many patients of this class, I have never made a physical examination in a virgin female, in a single instance, unless the patient had been treated in vain for years by others, or for months by myself, by means directed both to the uterine and to the general symptoms.

The treatment of the local element in inflammatory affections of the neck of the uterus, which I adopt, may be given in a few words; it is the treatment followed in all chronic inflammatory diseases situated in a position attainable by surgical means. If there be any acute or subacute inflammation present, it must be subdued by antiphlogistics and astringents. When once this has been accomplished, the morbid action still persisting must be modified and converted into healthy vital action by stimulants. Thus, in the first stage of treatment, we use emollients, leeches, and astringent lotions; in the second, we apply to the diseased surface caustics, in order, secondarily, to set up healthy action. The eschar, which they produce, is eliminated and thrown off by a process of vital inflammation, which tends to restore the healthy condition of the diseased surface. The intensity of the stimulant to be used depends on the chronicity and sluggishness of the disease, and on its resistance to therapeutic means. In recent and slight cases, the nitrate of silver is sufficient; but when the morbid state penetrates below the surface, and the submucous tissues are diseased and hypertrophied, it is generally insufficient, and stronger agents, agents which produce a greater reaction, are required. Then it is that the mineral acids should be used. Occasionally, however, even these fail when the disease has existed many years, and there is considerable deep-seated chronic inflammation and hypertrophy. It is in such instances that potassa fusa, or potassa cum calce, proves a most invaluable remedy; inasmuch as, by its means, any amount of vital reaction, that is required, can be obtained. Since I have known its use, that is, for the last fourteen years, I have not met with any case of inflammatory disease of the cervix which has not eventually given way. But it is more especially since I have simplified the application of potassa cum calce, by running it into fine cylinders, like those of nitrate of silver, that it has proved invaluable to me; inasmuch as it has thus been rendered nearly as easy of use, and as free from risk in application, as the nitrate of silver; moreover, it may thus be much more easily graduated at the will of the operator. I must, however, again impress on my hearers that I never apply potassa cum calce to destroy tissues, but merely to set up healthy eliminatory inflammation, under the in-

fluence of which, indurated and hypertrophied tissues melt and are resolved, and morbid surfaces become healthy and heal.

I was induced, some years ago, empirically to apply, with great caution, the smallest sized potassa cum calce cylinders to the cervical canal, in intractable inflammation, as a last resource; and with great success. This success I now attribute to the fact of its reaching, by its more powerful action, the inflamed mucous follicles which lie between the radiations of the arbor vitæ, and are thus subtracted from the influence of milder agents.

Potassa fusa was first introduced as a remedy in these forms of uterine inflammation by M. Gendrin of Paris, but had not been adopted by the profession when I left that city, nine years ago; although, I believe, it has since been more favourably received. I can myself claim the merit of having introduced it into practice in this country, and of having simplified its use as above mentioned. I am continually using it with proper precaution, avoiding scrupulously the acute or subacute stages of disease, and never meet with any accident. I may say the same, as far as I am aware, of the numerous practitioners who have adopted it, throughout the country, on my recommendation. I must, however, caution those who would use it inside the os, to apply it very gently, and to guard against the too great closing of the cervical orifice, as the surface touched heals. For want of these precautions, in several cases treated in the country, in which I have been consulted, the os uteri has been all but closed. The dilatation of the contracted os is always easily accomplished when this is the case, by means of graduated bougies; but each contraction had better be prevented by proper judgment and care in the first treatment of the patient.

9, Cambridge Square, Hyde Park, April 1851.

BIBLIOGRAPHICAL RECORD.

Annual Address delivered before the Hunterian Society of London, Feb. 19th, 1851. By John C. W. Lever, M.D., Physician-Accoucheur to, and Lecturer on Midwifery at, Guy's Hospital. Printed for the Author. 8vo, pp. 23. Southwark (London): 1851.

Puerperal Fever is the subject of this address; and it is very ably and very instructively handled by the author. Dr. Lever's opinions being those of an accurate, independent, and accomplished observer, and being based on a twenty years' experience, in a very wide field of observation, have special claims upon the notice of the profession. They coincide, to a great extent, with the views of Dr. Fergusson, as to the nature of the different forms of the disease; of Mr. Nunneley, as to the relationship between puerperal fever and erysipelas; and of Drs. Simpson and Henry Kennedy, as to the analogy between surgical and puerperal fever.[1] Dr. Lever emphatically reprobates the recklessness of those practitioners who attend women in labour, immediately after dressing erysipelatous sores, performing *post-mortem* examinations, or visiting those labouring under puerperal fever, or bad forms of erysipelas. He thus concludes his remarks on this subject: "So convinced am I of the contagiousness of this disease, that I confess I have no

[1] London Journal of Medicine for January 1851, p. 77.

sympathy for those who, with these indisputable facts before them, lose case after case, from being themselves the vehicles of contagion ; gladly received into homes where hope is budding, and all joyful anticipation, they but resemble the destroying angel, for, instead of mirth, congratulation, and merriment, they leave sadness, gloom, and desolation."

THE HISTORICAL RELATIONS OF ANCIENT HINDU WITH GREEK MEDICINE, IN CONNEXION WITH THE STUDY OF MODERN MEDICAL SCIENCE IN INDIA ; being a General Introductory Lecture, delivered June 1850, at the Calcutta Medical College. By ALLAN WEBB, M.D., Author of the *Pathologia Indica ;* Surgeon in the Bengal Army ; Professor of Descriptive and Surgical Anatomy. pp. 34. Calcutta : 1850.

THIS is an introductory discourse which was delivered by Professor ALLAN WEBB, at the opening of the sixteenth session of the Calcutta Medical College. It is mainly occupied with "an examination into the state of medicine in India, previous to the introduction of European science, and with a comparison of it with medical science among the Greeks ; especially as respects —I. *Anatomy ;* II. *Physiology ;* III. *Pathology and Practical Medicine.*"

In Anatomy, the knowledge of the Hindoos was most limited, being only obtained by rubbing with a brush a body which had undergone putrefaction for seven days. Dr. Webb refers to the beautiful muscular expression and anatomical correctness of the Grecian sculptures ; and states that even "the most perfect specimens of Hindoo art—the relievos in their most ancient cavern temples, show nothing that for truth or form can compare with Greek specimens of art". These sculptures give no evidence that the Hindoos had ever attained to a knowledge of the muscles, or of their power of expression.

In Physiology, we have the "elementary theory" present, both in Hindoo and in Greek medicine. Hippocrates and Plato among the Greeks, and Charaka and Sushruta among the Hindoos, all agreed in teaching that fire, air, earth, and water, were the constituent elements of their human body ; and to these the Hindoos added *ether (akasa).* The following specimen of physiological doctrine is given by Dr. Webb, from the writings of Sushruta, the Galen of India. "'When digestion is accomplished, the respective elements unite with those which had entered into the formation of the body : the earth unites with earth, water with water, etc.; and they, acting on the inherent qualities of each of the five elements, mix and increase those in the body ; smell, the property of earth, with that of the body, taste with water, touch with air, and sound with ether.' This", says Dr. Webb, "is exactly what Empedocles taught—viz., that sensation takes place only through the affinity of elements composing the object perceived, with the elements of the perceptive organs or senses".

In the Hindoo system, air, bile, phlegm, and blood, are the chief humours of the body ; and these four words "as fully explain the mysteries of Hindoo pathology, as '*pax vobiscum*' represents in the mouth of Wamba, the son of Witless, all requisite learning, all monkish theology". Now these potent agents—air, bile, phlegm, and blood—are dealt out by Plato, just in the same style as by Charaka and Sushruta, as being, when deranged, the source of all diseases. And Dr. Webb brings forth very cogent internal evidence to prove the Hindoo origin of the Greek medical philosophy. "When we remember that Pythagoras introduced Brahminical institutions into Greece ; that he, as well as Plato, believed in the transmigration of souls ; that Hindoos never travelled, but Greeks did ; we can have very little doubt, that India was the source whence the Greeks derived their system of philosophy and of medicine. The analogy between the Hindoo and Greek systems of medicine is certainly much too close to be the result of accident": and this view is strengthened by the remarkable similarity in the writings of the philosophers of the two nations.

Such was the state of professional darkness among the Hindoos, until the institution of the Medical College in Calcutta in 1835; and, among the triumphs which are gradually being gained over prejudices, one of the most important has been the engaging the Mahomedan Hindustani students in the dissection of the human body. For this, the enlightened Hindoo practitioner will have to remember with gratitude the energy of Dr. Goodeve, and Pundit Moodoosudun Guptoo. "We must all rejoice", says Dr. Webb, "at the success of this great experiment, which has, in the vernacular tongue, brought within the grasp of the people that knowledge which is of all others the foundation of medical science. Now that the splendid work on Anatomy, which my colleague Dr. Mouat has completed, in the Oordoo language, is in the hands of these students, their difficulties are much less. It is, I apprehend, the first work upon the subject which has been compiled for Mahomedan students since the days of Galen."

Notwithstanding the miserable condition of the Hindoo pathology, it has been said that their practical medicine was in a better state. "In therapeutics, we hear of cures now-a-days of epilepsy and lepra, by combinations of drugs reputed to be of great antiquity. Professor Royle proves that Greeks and Arabs borrowed from their materia medica. In midwifery, we find that embryotomy was practised, and rules laid down for delivery. In surgery, lithotomy is described, operations for new ears and noses, for piles, fistula, cataract, etc." And Dr. Webb, who is a believer in mesmerism, mentions this practice as among the most curious relics of Hindoo medicine. The operation for cataract is fairly described by Sushruta, and was generally practised in India before the English arrived in that country. The itinerant *Baidias* sometimes poke out eyes; but Dr. Webb has seen many to whom they have restored sight. It is very probable also, that lithotomy was commonly practised at a period (A.D. 1460) when European surgery was in such a low state, that Colot, in Paris, was obliged to beg a man's life from the gallows to prove that the operation was not mortal!

Much good may be hoped for—and, indeed, we may say, has already resulted—from the establishment of the Calcutta Medical College, and from the diffusion of European science among the natives of India. We are glad to notice the following encouraging tidings of four young Hindoos, who were a few years since sent to England to pursue their medical studies in University College. "Dwarkanath Bose was the first of our gallant band of medical pioneers, to return to us with the diploma of the Royal College of Surgeons. He is now one of our teachers of anatomy. Soorjoo Coomar Chuckerbutty, just returned with the diploma of the London University, is Assistant-Physician to the College Hospital. Drs. Seal and Bose both hold appointments in this city."

Before concluding, we may record, in connection with the above subject, our satisfaction at observing that Persia, Abyssinia, and Hawaii, had last session furnished students to the Medical School of Paris. And, at the same time, we must express the disgust which we felt at reading that some students at a medical college in the land of liberty, equality, and fraternity—America—had sought, though ineffectually, to deprive some coloured persons of the privilege of attending lectures. We wish success to the Indian Medical Colleges, and to all attempts to diffuse sound knowledge, special or general, among the less civilised nations; and we would rejoice to hear that Drs. Quashi and Sambo had gone forth, enlightened with European knowledge, to practise the healing art among their brethren of Congo or Guinea, and to introduce to them the comforts and blessings of civilisation and Christianity.

We recommend Dr. Webb's Lecture to all, who are interested in the subject of which it treats.

A Letter to the Rt. Hon. Sir George Grey, Bart., M.P., on Medical Registration, and the Present Condition of the Medical Corporations. By Emeritus. pp. 22. London: 1851.

Of all the pamphlets that have appeared during the excitement attending the medical reform question, this is one of the best. It is evidently written by one who has no interested motives to bias his mind in favour of any of the present Corporations; and, indeed, from the fact, that he dates his pamphlet from the London Custom House, and from the title which he chooses for his *incognito*—Emeritus—it is evident that he no longer practises the medical profession. He does not, however, fall into the opposite error of pouring out indiscriminate abuse against all the licensing and examining bodies; but he very judiciously, as we think, points out the peculiar defects in the existing systems, and recommends plans for their amelioration. His chief object in this pamphlet appears to be, to recommend the establishment of an uniform system of registration of medical practitioners; a proposition so reasonable, that we cannot but wonder that it has never been adopted. The chief defect in previous plans of registration was that the mere registration was to give almost a legal right to practise, and the effect would have been to confound all distinctions in the profession; a consummation which we certainly do not desire. But Emeritus recommends that all persons who register, should also append their qualifications; the effect of which plan would be, as we conceive, not to confound the grades of the profession, but distinctly to denote them: and the public would then no longer be excusable for sending for a licentiate of Apothecaries' Hall, possessing no other qualification, to set a broken leg or operate for a hernia; nor, on the other hand, would they send for a member of the Royal College of Surgeons of England, possessing only that qualification, for the treatment of pneumonia or hydrocephalus. In many of the views concerning the defects of existing systems, we heartily concur with the author of the pamphlet. We agree with him, that a pupilage of one or two years would be better than the present system of a compulsory apprenticeship of five years; that the diploma of medicine ought not to be given, as it is in the Scotch Universities, at the early age of twenty-one, and after a curriculum of education and an examination in no degree superior to those of the London Apothecaries' Company; and that the present system of granting diplomas by the London College of Surgeons is very defective, because, in the words of the author, "the limited examination of the Royal College of Surgeons, London", enables the members to obtain a sanction, "by which, without having passed any examination in many important branches of medical science, they impose upon the ignorance and credulity of the public in medical matters; and though imperfectly educated, and only half examined, they practise every branch of the profession, even in this country, but particularly in the colonies, and on board of emigrant ships, to which they should never be appointed on the strength of the diploma of the London College. If this had been attended to, the surgeons attached to those vessels would have been a more educated, and consequently superior class, and might have checked the disgraceful scenes reported to have lately occurred on board those ships. It also has the injurious tendency," adds the author, "of lowering the standard of medical education, and of causing many idle and ignorant medical students from Scotland and Ireland, to pass for surgeons the College of England, who are tempted, by the reduced scale of examination, to avoid the more extensive one of the Scotch and Irish Colleges; and it is even said," (but here we hope our author is in error,) "that their rejected candidates have subsequently passed, and found almost immediate admission into, the London College."

We conclude by repeating our good opinion of this pamphlet; and although, from its bold and independent tone, it is not likely to obtain favour from any of the Corporations, we think that, on that very ground, it

ought to attract the attention of Government. The plan of registration is so simple, and its advantages so great, that we wonder it is not adopted without delay.

Das Schraeg Verengte Becken nebst einem Anhange ueber die wichtigsten Fehler des weiblichen Beckens ueberhaupt. Von Dr. Franz Carl Naegele. Mit sechzehn Tafeln. Zweite Ausgabe. Mainz: 1850.

[The Obliquely Contracted Pelvis, with an Appendix on the most important Defects of the Female Pelvis generally. By Dr. Franz Carl Naegele. With sixteen Engravings. Second Edition. pp. 118. Mayence.]

Dr. Naegele informs us, in his Introduction, that, so long as thirty-four years ago, he observed the first two specimens of the peculiar variety of pelvic deformity, which forms the subject of his present work. He was then struck with the difference which existed between this deformity, and that which results from rachitis and mollities ossium, and was led to regard the disease as one of a peculiar and undescribed kind; but it was not until the year 1828, that he succeeded in meeting with a pelvis, in his own practice, which presented the same deformity as the two which had previously engaged his attention. Since that time, he has caused investigations to be made, both by himself, and by his friends and pupils, in search of similar deviations from the natural structure; and these researches have been rewarded by the discovery of various similar cases of malformation of the female pelvis.

The distinguishing characters of this deformity are, complete anchylosis of one sacro-iliac symphysis, or complete union of the sacrum with one ilium; a wasting or defective formation of the lateral half of the sacrum, and diminished breadth of the anterior sacral foramina of the side where the anchylosis exists; on the same side, a diminished breadth of the os innominatum, and a diminished size of the ischiatic notch; and, in addition to these peculiarities, the sacrum appears to be pushed in towards the side of the anchylosis, and its anterior surface, on this side, is also more or less shortened, while the pelvic symphysis is pushed over to the opposite side, and thus this symphysis stands not on a level with the promontory, but obliquely opposite to it; and, on the side of the anchylosis, the interior surface of the lateral wall, and of the lateral half of the anterior wall of the pelvis, is less hollowed, or flatter, than in the normal pelvis.

Such is a brief description of this very interesting deformity, for the elucidation of which the profession is much indebted to Dr. Naegele. His work is illustrated by sixteen very beautiful engravings, most of them coloured; and, altogether, the work will add to the reputation of the late distinguished professor. In conclusion, we must add that several preparations similar to those described by Dr. Naegele exist in the museums of this country.

De Acidi Osmici in Homines et Animalia Effectu Commentatio Physiologica. Scripsit Prof. Dr. F. Branell, Vimariensis. pp. 117. Casani: 1849.

This is a dissertation upon the physiological effects of a substance hitherto very little known in its relations to the animal system. Professor Clausius, while examining the residue of the platinum ores, was struck by the singular properties of the vapours of osmic acid, as exhibited upon his assistant and his servants; and hence Dr. Branell was led to investigate more closely the powers of this acid. He therefore instituted a series of experiments on various animals, which occupied him for four years, and the results of his investigations are contained in the present treatise. The author deserves great credit for his industry in conducting this extensive series of experiments; and his treatise is a very good specimen of a toxicological monograph.

ALPHABETICAL CATALOGUE

Of the Papers which have appeared in the French Medical Journals for 1850.

BY ALEXANDER HENRY, M.D.

(Concluded from p. 366 of last Number.)

THE following are the Journals referred to in this Catalogue, with the abbreviations used.

Bulletin de l'Académie Nationale de Médecine ...	Bull. de l'Acad. de Méd.
Comptes Rendus de l'Académie des Sciences ...	Compt. Rend.
Archives Générales de Médecine	Arch. Gén. de Méd.
Bulletin Général de Thérapeutique	Bull. Gén. de Thér.
Gazette Médicale	Gaz. Méd.
——— des Hôpitaux	Gaz. des Hôp.
L'Union Médicale	Union Méd.
Annales d'Oculistique	Ann. d'Ocul.
——— Médico-Psychologiques	Ann. Méd.-Psych.
——— d'Hygiène Publique	Ann. d'Hyg. Pub.

LACHRYMAL Gland and Ducts, Congenital Hypertrophy of. GLUGE (Dr.) Ann. d'Ocul., April 1850, vol. v, 4th S., p. 155.

LACTATION, Remarks on. TROUSSEAU (M.) Gaz. des Hôp., Feb. 21 and 23, 1850, vol. ii, 3rd S., pp. 89 and 94.

LARYNGITIS, Œdematous, Bronchotomy in. SESTIER (Dr. F.) Arch. Gén. de Méd., August 1850, vol. xxiii, 4th S., p. 385 ; Sept., Nov., and Dec., vol. xxiv, pp. 35, 297, and 441.

LEAD-COLIC, Treatment of by Local and Internal use of Chloroform. ARAN (Dr.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 296. Abs. in Lond. Journ. of Med., Jan. 1851, vol. iii, p. 67.

LITHOTOMY, bilateral. CAZENAVE (M.) Bull. de l'Acad. de Méd., Aug. 13, 1850, vol. xv, p. 1049. Lithotomy and Lithotrity, Accidents Complicating, and means of preventing them. PETRÉQUIN (M.) Gaz. Méd., July 20, Aug. 3 and 31, pp. 546, 578, 638.

LIVER, Description and Semeiological Value of some Symptoms of Disease of. MONNERET (M.) Bull. de l'Acad. de Méd., Oct. 15, 1850, vol. xvi, p. 71. Purulent Cyst communicating with Left Lobe of : Case. VAUTHIER (Dr. A.) Union Méd., Feb. 8, 1850, vol. iv, p. 58. Opening of Abscesses and suppurating Acephalocystic Tumour of into the Bronchi. FAUCONNEAU-DUFRESNE (M.) *Ibid.*, Oct. 15 and 17, 1850, vol. iv, pp. 502 and 506.

LUNG, diffuse Gangrene of. HARDY (M.) Gaz. des Hôp., March 19, 1850, vol. ii, 3rd S., p. 133.

LUPUS, Chloride of Gold in. MALICHECQ (Dr.) Bull. Gén. de Thér., 1850, vol. xxxviii, p. 456.

LYPOMANIA, Medico-legal Report of Case of. GIRARD (M. H.) Ann. Méd.-Psych., Jan. 1850, vol. ii, p. 55.

MAMMARY GLAND, Partial Hypertrophy of. LEBERT (M.) Gaz. des Hôp., Aug. 27 and 29, 1850, vol. ii, 3rd S, pp. 402 and 406.

MANUFACTURING TOWNS. VILLERME (M.) Ann. d'Hyg. Pub., April 1850, vol. xliii, p. 241.

MARITIME Diseases. DUTROULAU (M.) Gaz. Méd., Aug. 17, Sept. 14, vol. v, 3rd S., pp. 607, 670.

MEASLES without Eruption, in Paris. Gaz. Méd., April 20, 1850, vol. v, 3rd S., p. 295. Abs. in Lond. Journ. of Med., June 1850, vol. ii, p. 572.

MEDICAL CONSTITUTION of the Third and Fourth Quarters of 1849. Gaz. Méd., Feb. 9 and 16, 1850, vol. v, 3rd S., pp. 101 and 121. Of the First Quarter of 1850, in Paris : with especial regard to Meteorological Observations. Gaz. Méd., May 18 and 25, 1850, vol. v, 3rd S., pp. 370 and 390. Of the Second Quarter of 1850. Gaz. Méd., Aug. 17 and 31, 1850,

vol. v, 3rd S., pp. 605 and 630. Of the Third Quarter of 1850. Gaz. Méd., Nov. 30 and Dec. 7, 1850, vol. v, 3rd S., pp. 848 and 869.

Medical Report of the Asylum at Maréville. Morel (M.) Ann. Méd.-Psych., July 1850, vol. ii, p. 353.

Medicinal Treatment, absolute necessity of. Dorvault (M.) Bull. Gén. de Thér., 1850, vol. xxxviii, p. 27.

Menstruation, Influence of different forms of Genital Organs on. Bernard (Dr.) Union Méd., Oct. 22, 1850, vol. iv, p. 513.

Mental Diseases, Lectures on. Falret (M.) Gaz. des Hôp., May 21 and 23, June 20, July 2, 11, 23, 30, and 31, August 8 and 24, Sept. 5, 12, 17, and 28, Oct. 8, 22, and 31, Nov. 14 and 28, Dec. 14, 1850, vol. ii, 3rd S., pp. 238, 242, 290, 310, 326, 345, 358, 362, 373, 397, 417, 430, 437, 468, 474, 498, 513, 533, 559, 586.

Mercurial Poisoning (Hydrargyria) in Children. Baron (Dr. C.) Gaz. Méd., Jan. 12 and 26, 1850, vol. v. 3rd S., pp. 25 and 71.

Mercury, new method of Pulverising. Stanislas Martin (M.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 499.

Mineral Waters of Cransac, Report on. Caventou (M.) Bull. de l'Acad. de Méd., 1850, vol. xv, p. 506. Of Montégut-Ségla (Haute-Garrone). Henry (M. O.) *Ibid.*, July 9, p. 941. Of Château Gontier. Henry (M. O.) *Ibid.*, July 9, p. 944. Ferruginous, of Bagnères de Bigorre. Henry (M. O.) *Ibid.*, July 23, p. 980. Of Bagnères de Luchon. Filhol (M.) *Ibid.*, Aug. 13, p. 1035. Of Wattevilliers. Henry (M. O.) *Ibid.*, Oct. 29, vol. xvi, p. 84. Of Dames Brosson at Casset. *Ibid.*, p. 86.

Monomania, Intellectual, case of. Girard (M. H.) Ann. Méd.-Psych., July 1850, vol. ii, p. 413.

Murmur, Placental, new Theory of Cause of. Cazeaux (Dr. P.) Arch. Gén. de Méd., March 1850, vol. xxii, 4th S., p. 336. Abs. in Lond. Journ. of Med., June 1850, vol. iii, p. 576.

Muscular Current, Law of: modification produced by Contraction. Du Bois Raymond (M. E.) Compt. Rend., March 18, and April 8, 1850, vol. xxx, pp. 349 and 406.

Mydriasis, Different kinds of. Tavignot (M.) Gaz. des Hôp., March 12, 1850, vol. ii, 3rd S., p. 123.

Myelitis, Lectures on. Gendrin (M.) *Ibid.*, March 30, April 4 and 13, 1850, vol. ii, 3rd S., pp. 155, 161, and 177.

Needle-Makers, Health of. Gaultier de Claubry (M.) Ann. d'Hyg. Pub., Jan. 1850, vol. xliii, p. 82.

Nervous Influence, Rapidity of Transmission of. Helmholtz (Dr.) Compt. Rend., Feb. 25, 1850, vol. xxx, p. 204.

Neuralgia (and Muscular Rheumatism), Hydrotherapeutic Treatment of. Fleury (Dr. L.) Gaz. Méd., April 13, 20, and May 4, 1850, vol. v, 3rd S., pp. 283, 300, and 342. Of Brachial Plexus. Neucourt (Dr. F.) Arch. Gén. de Méd., Nov. 1850, vol. xxiv, 4th S., p. 257. Epidemic ophthalmic, in Algiers. Bertherand (Dr. E. L.) Ann. d'Ocul., Nov. 1850, vol. vi, 4th S., p. 223. Neuralgic affections, nature of. Chomel (M.) Union Méd., Jan. 24, 1850, vol. iv, p. 41.

Nose, case of Hypertrophy of. Hutin (M.) Bull. de l'Acad. de Méd., 1850, vol. xv, p. 582.

Ophthalmia in the Portuguese Army. Cunier (Dr. F.) Ann. d'Ocul., Jan. and Feb. 1850, vol. v, 4th S., p. 52. Among the poor in Brussels. Bosch (Dr. J.) *Ibid.*, July, Aug. and Sept. 1850, vol. vi, 4th S., p. 95. Purulent and Gonorrhœal, Differential Diagnosis of. Henrotay (Dr. E.) *Ibid.*, Oct. 1850, vol. vi, 4th S., p. 179. Contagious, in new-born children, identical with Army Ophthalmia. Thiry (Dr.) *Ibid.*, May and June, 1850, vol. v, 4th S., p. 225. Chronic, cauterisation of nasal fossæ in. Tavignot (M.) *Ibid.*, p. 232. Treatment of. Langenbeck

(M. Max.) *Ibid.*, July, Aug. and Sept. 1850, vol. vi, 4th S., p. 100. Granular, acetate of lead in. Cunier (Dr.) Union Méd., Feb. 12, 1850, vol. iv, p. 75. Buys (Dr.) Ann. d'Ocul., July, Aug. and Sept. 1850, vol. vi, 4th S., p. 114. See Lond. Journ. of Med., Feb. 1850, vol. ii, p. 109. Van Lil (Dr.) *Ibid.*, Nov. 1850, p. 217.

Ophthalmic Diseases, Collodion in. Deval (Dr. Charles). Union Méd., April 4 and 6, 1850, vol. iv, pp. 165 and 170.

Opium and its Preparations, Pharmacological Remarks on. Chevalier and Guilliermond (MM.) Bull. Gén. de Thér., 1850, vol. xxxviii, p. 118.

Orbit, numerous pieces of Glass introduced into. Collette (Dr. F. C.) Ann. d'Ocul., May and June 1850, vol. v, 4th S., p. 217.

Orchitis ; treatment by Chloroform. Bouisson (M.) Union Méd., Jan. 8, 1850, vol. iv, p. 16. From Annales de la Soc. Méd. de la Flandre.

Ovaries, influence of, ancient opinions on. Chereau (Dr. A.) Union Méd., Nov. 9, 1850, vol. iv, p. 543.

Ovum of seven or eight weeks, with Decidua entire. Cazenave (M.) Bull. de l'Acad. de Méd., 1850, vol. xv, p. 546.

Oxygen, Function of in the Animal Economy. Mialhe (M.) *Ibid.*, Sept. 17, 1850, vol. xv, p. 1124.

Ozæna and its Treatment. Simon (M. Max.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 9.

Palpebral Granulations, Pathological Anatomy of. Hairion (M.) Gaz. Méd., May 4, 1850, vol. v, 3rd S., p. 336 ; and Ann. d'Ocul., March 1850, vol. v, 4th S., p. 109. Various modes of treating. De Condé (Dr.) Ann. d'Ocul., Nov. 1850, vol. vi, 4th S., p. 205. (See also, Ophthalmia.)

Paludal Diseases. Duchassaing (M.) Gaz. Méd., Sept. 21 and Oct. 12, 1850, vol. v, 3rd S., pp. 684, 743.

Pancreatic Juice, use of, in Digestion. Bernard (M.) Gaz. Méd., March 23, 1850, vol. v, 3rd S., p. 216.

Paracentesis Thoracis in Hôpital des Enfans Malades. Lacaze de Thiers (M.) Union Méd., March 21, 23, 26, 30, and April 2, 1850, vol. iv, pp. 142, 145, 149, 158, and 161.

Paralysis, General, of the Insane. Moreau (Dr. J.) Gaz. Méd., May 11, 1850, vol. v, 3rd S., p. 356. Billod (Dr. E.) Ann. Méd.-Psych., Oct. 1850, vol. ii, p. 608. General Diagnosis of various forms of, by Local Galvanism. Brierre de Boismont (M.) Union Méd., August 26, 1850, vol. iv, p. 418. Facial. *Ibid.*, Jan. 12 and 15, 1850, vol. iv, pp. 21 and 25. Facial, remarkable case of. Cruveilhier (M.) Gaz. des Hôp., Feb. 14, 1850, vol. ii, 3rd S., p. 77. Facial, exaltation of Hearing in. Landouzy (M. H.) Union Méd., Dec. 21 and 26, 1850, vol. iv, pp. 616 and 623. Of third and sixth nerves, observations on. Deval (M. C.) Ann. d'Ocul., April 1850, vol. v, 4th S., p. 147. Of Upper Extremity, on state of Electro-muscular Contractility and Sensibility in. Duchenne (Dr.) Arch. Gén. de Méd., Jan. 1850, vol. xxii, 4th S., p. 5.

Parasitic animals, entozoic, theory of origin of. Léveillé (Dr.) Union Méd., March 30, 1850, vol. iv, p. 157.

Paris, Statistics of Deaths in, since 1809. Trébuchet (M.) Ann. d'Hyg. Pub., vol. xliii, Jan. 1850, p. 5 ; vol. xliv, July, p. 71 ; Oct., p. 322.

Parotitis, epidemic of, in Geneva, during 1848 and 1849. Rilliet (Dr.) Gaz. Méd., Jan. 12 and 19, 1850, vol. v, 3rd S., pp. 22, 42.

Pathological Anatomy, plan and direction to be followed in study of. Segond (Dr. L. A.) *Ibid.*, Jan. 26, vol. v, 3rd S., p. 69.

Pellagra in the Valley of Vernet (Eastern Pyrenees) ; cases, nature, and causes. Courty (M. A.) Gaz. Méd., July 13, Aug. 10 and 24, 1850, vol. v, 3rd S., pp. 522, 592, and 620. Case of, followed by death. Un. Méd., August 22, 1850, vol. iv, p. 409.

Pemphigus, Clinical Lecture on. Cazenave (M.) Gaz. des Hôp., Oct. 24, 1850, vol. ii, 3rd S., p. 501.

Peritonitis from Injection of Uterus. Gubian (M.) Gaz. des Hôp., March 30, 1850, vol. ii, 3rd S., p. 155. Chronic, Clinical Researches on. Bernard (M. Ch.) *Ibid.*, Jan. 5, 10, and 12, 1850, vol. ii, 3rd S., pp. 9, 17, 22.

Phlebitis, Spontaneous, Treatment of. Forget (M.) Bull. Gén. de Thér., 1850, vol. xxxviii, p. 337.

Phosphene as a sign of Functional Life in the Retina. Serre (M.) Ann. d'Ocul., July, Aug. and Sept. 1850, vol. vi, 4th S., p. 31 ; Oct. p. 160. In Myopia and Presbyopia. Serre (M.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 410. In Amaurosis. *Ibid.*, p. 454.

Phthisis, Pulmonary, Cl. Lect. on. Gendrin (M.) Gaz. des Hôp., Jan. 29, Feb. 5, 12, 19, 28, and March 14, 1850, vol. ii, 3rd S., pp. 49, 61, 73, 86, 101, and 125. Phthisis and Pregnancy, reciprocal influence of. Grisolle (M.) Arch. Gén. de Méd., Jan. 1850, vol. xxii, 4th S., p. 41. Tr. in London Journ. of Med., April 1850, vol. ii, p. 382. Cod-liver oil in. Duclos (Dr.) Bull. Gén. de Thér., 1850, vol. xxxviii, pp. 391 and 488. Seeds of Phellandrium Aquaticum in. Valleix (M.) *Ibid.*, 1850, vol. xxxviii, pp. 106 and 153. Sandras (Dr.) *Ibid.*, 1850, vol. xxxviii, p. 241. Inhalation of Carbonic Acid gas in ; new Auscultatory Sign of Latent Tubercles. Goin (Dr.) Bull. de l'Acad. de Méd., Oct. 15, 1850, vol. xvi, p. 56.

Physiology, History and General Systemisation of. Legond (Dr. L. A.) Gaz. Méd., June 22, and July 6, 1850, vol. v, 3rd S., pp. 464 and 504.

Pityriasis capitis, Cl. Lect. on. Cazenave (M.) Gaz. des Hôp., Sept. 10, 1850, vol. ii, 3rd S., p. 426.

Pleural Effusions, Production of Metallic Sound in Course of. Notta (Dr. A.) Arch. Gén. de Méd., April 1850, vol. xxii, 4th S., p. 423.

Pleurisy, Secondary, following Inflammation of the Breast or Axilla. Broca (Dr. P.) *Ibid.*, April 1850, vol. xxii, 4th S., p. 385. Chronic, Paracentesis Thoracis in. Laveran and Boudant (MM.) Bull. de l'Acad. de Méd., 1850, vol. xv, p, 298.

Pneumonia, Importance of Rigor in Diagnosis of. Chomel (M.) Union Méd., Feb. 19, 1850, vol. iv, p. 87. Paralysis following. Macario (Dr.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 543. Abs. in Lond. Journ. of Med., Feb. 1851, vol. iii, p. 163. Of New-born Children, certain Stethoscopic Signs in Relation to. Trousseau and Lasegue (Drs.) Arch. Gén. de Méd., Oct. 1850, vol. xxiv, 4th S., p. 129.

Population, Statistical Researches on Laws of. Boudin (M.) Ann. d'Hyg. Pub., July 1850, vol. xliv, p. 5.

Portal Vein, Inflammation of, Case. Marotte (M.) Gaz. des Hôp., April 9, 1850, vol. ii, 3rd S., p. 170.

Potash, Oxalate of, Poisoning by, in mistake for Sulphate of Potash. Union Méd., March 14, 1850, vol. iv, p. 131.

Potassium, Bromide of, Physiological Effects of : Production of Anæsthesia. Rames (M. J.) Union Méd., Jan. 5, 1850, vol. iv, p. 10. Huette (M.) Gaz. Méd., June 8, 1850, vol. v, 3rd S., p. 432.

Pregnancy, Diagnosis of. Dubois (M. P.) Gaz. des Hôp., April 4 and 18, 1850, vol. ii, 3rd S., pp. 161 and 185.

Pupil, Glistening of. Blasius (Dr.) Ann. d'Ocul., Jan. and Feb., 1850, vol. v, 4th S., p. 3.

Pus, Blue, Nature and Causes of. Sédillot (M.) Gaz. Méd., Sept. 7, 1850, vol. v, 3rd S., p. 656.

Pustule, Malignant, Internal Pathological Lesions in. Boyer (M.) Gaz. des Hôp., Oct. 15, 1850, vol. ii, 3rd S., p. 485.

Quinine, Sulphate of, Mode of Action, and General Therapeutic Properties of. Semanas (Dr.) Gaz. Méd., Jan. 19, 1850, vol. v, 3rd S., p. 47.

Rectocele, Vaginal: Cases. Malgaigne (M.) and Forget (M. A.) Union Méd., May 21, 1850, vol. iv, p. 245.

Rectum, Tumour of, containing Débris of a Fœtus. Bouchacourt (M.) Gaz. Méd., Aug. 31, 1850, vol. v, 3rd S., p. 635. Stricture of, Treated by Forced Dilatation. Dieulafoi (M.) Union Méd., Dec. 31, 1850, vol. iv, p. 631. Case of Absence of, with apparently well-formed Anus. Forget (Dr. A.) *Ibid.*, August 29, 1850, vol. iv, p. 422.

Rheumatism, Acute and Chronic Articular; Lect. on. Gendrin (M.) Gaz. des Hôp., June 6, 22, 29, July 6 and 11, 1850, vol. ii, 3rd S., pp. 265, 295, 306, 319, and 327. Acute Articular, terminating in Suppuration. Trousseau and Lasègue (MM.) Union Méd., August 24, 1850, vol. iv, p. 413. Acute Articular, Observations on Treatment of. Legroux (M.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 145. Acute Articular, Treatment by Flying Blisters. Dechilly (Dr.) Bull. de l'Acad. de Méd., April 30, 1850, vol. xv, p. 665. Martin-Solon (M.) Bull. Gén. de Thér., 1850, vol. xxxviii, pp. 385 and 534. Muscular, (and Neuralgia), Cold Douche and Sweating in. Fleury (M.) Compt. Rend., Jan. 21, 1850, vol. xxx, p. 51.

Rice-Fields, Insalubrity of. Boileau-Castelnau (Dr. Ph.) Ann. d'Hyg. Pub., April 1850, vol. xliii, p. 327.

Rickets and Osteomalacia, Comparison of. Trousseau and Lasègue (MM.) Union Méd., June 27, July 4, 20, 30, August 8, Oct. 12, 22, 31, Nov. 7, 1850, vol. iv, pp. 314, 326, 354, 370, 385, 497, 514, 530, and 537.

Rupia, Cl. Lect. on. Cazenave (M.) Gaz. des Hôp., Nov. 16, 1850, vol. ii, 3rd S., p. 538.

Salicaria, Chemical and Medical Researches on. Meurdefroy and S. Martin (MM.) Bull. Gén. de Thér., 1850, vol. xxxviii, pp. 66 and 121.

Scarlatina, Abscess in Neck after, and Rupture of Internal Jugular Vein: Recovery. Depéret-Muret and Boulland (Drs.) Union Méd., August 24, 1850, vol. iv, p. 414. Abs. in Lond. Journ. of Med., April 1851, vol. iii, p. 373.

Sciatica, Observations on Treatment of. Forget (Dr.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 337. Treatment of by Cauterisation of the Helix. Duchenne (Dr.) Union Méd., Oct. 8, 1850, vol, iv, p. 489. Valleix (M.) *Ibid.*, Nov. 21 and 23, vol. iv, pp. 564 and 568. Treatment of, by Cutaneous Galvanism. Duchenne (Dr.) *Ib.*, Oct. 24, 1850, vol. iv, p. 517.

Scrofula, Treatment of, by Walnut-Leaves. Negrier (Dr.) Arch. Gén. de Méd., Feb. and April 1850, vol. xxii, 3rd S., pp. 173 and 447.

Scurvy. Dutroulau (M.) Gaz. Méd., Sept. 17, 1850, vol. v, 3rd S., p. 670.

Seminal Matter, Peculiar Alteration in. Demeaux (M.) Gaz. des Hôp., Oct. 17, 1850, vol. ii, 3rd S., p. 489.

Shoulder-Presentations, Amputation of Arm not always necessary in. Chailly-Honoré (M.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 25. Abs. in Lond. Journ. of Méd., Jan. 1851, vol. iii, p. 73.

Skin-Diseases, Cauterisation in. Cazenave (M.) Gaz. des Hôp., Sept. 24, 1850, vol. ii, 3rd S., p. 449.

Speculum Uteri, New Form of, for Examining the whole extent of the Vagina and Cervix Uteri. Magonty (Dr.) Union Méd., Oct. 29, 1850, vol. iv, p. 525.

Spermatic Ducts, New Form of Obliteration of. Gosselin (M.) Gaz. Méd., Oct. 12, 1850, vol. v, 3rd S., p. 756.

Spinal Cord, Preservation of Life after Removal of Large Portion of. Brown-Séquard (Dr.) Compt. Rend., June 24, 1850, vol. xxx, p. 828.

Spleen, Hypertrophy of: Cases. Grisolle (M.) Bull. de l'Acad. de Méd., May 28, 1850, vol. xv, p. 762. Marchal de Calvi (M.) *Ibid.*, June 4, p. 797.

Staphyloma, Sclero-choroidal; with Microscopic Observations on Staphyloma in general. Hairion (Dr. F.) Ann. d'Ocul., July, Aug., and Sept., 1850, vol. vi, 4th S., p. 60.

Staphyloraphy, Operation for: Cases. Sédillot (M.) Compt. Rend., March 18 and April 1, 1850, vol. xxx, pp. 310 and 374; Aug. 5, vol. xxxi, p. 166. Memoir on. Roux (M.) *Ibid.*, June xxx, vol. 24, p. 789.

Strabismus, New Classification of. Corvisart (Dr. L.) Gaz. des Hôp., Jan. 10, 1850, vol. ii, 3rd S., p. 19. Direct. Borelli (Dr. J. B.) Ann. d'Ocul., July, Aug., and Sept., 1850, vol. vi, 4th S., p. 90; and Gaz. Méd., Sept. 21, 1850, vol. v, 3rd S., p. 690. Corvisart (Dr. L.) Gaz. des Hôp., Jan. 19, 1850, vol. ii, 3rd S., p. 35.

Strangulation, Internal, from Pressure of Cancerous Tumour: Case. Union Méd., Jan. 8, 1850, vol. iv, p. 15.

Sugar, Origin of, in the Animal Economy. Bernard (M. C.) Gaz. Méd., April 6, 1850, vol. v, 3rd S., p. 256.

Suicide during Insanity, Statistical Researches on. Brierre de Boismont (M.) Ann. d'Hyg. Pub., Jan. 1850, vol. xliii, p. 144.

Synchysis, Glistening: Extraction and Examination of Brilliant Plates in Anterior Chamber of Eye. Sichel (Dr.) Ann. d'Ocul., July, Aug., and Sept., 1850, vol. vi, 4th S., p. 491; Oct., p. 145.

Synovial Cysts of Hand and Thumb. Gosselin (M.) Bull. de l'Acad. de Méd., June 18, 1850, vol. xv, p. 868.

Syphilide, Squamous. Cazenave (M.) Gaz. des Hôp., Oct. 1, 1850, vol. ii, 3rd S., p. 461. Papular, *Ibid.*, Oct. 10, p. 477.

Syphilis, Letters on. Ricord (M.) Union Méd., Jan. 22, 31, Feb. 16, 26, March 19, 28, April 9, 23, May 28, June 6, 13, 20, July 2, 16, 23, 30, August 13, 26, Sept. 10, Oct. 1, 15, Nov. 2, 26, Dec. 3, 1850; vol. iv, pp. 37, 54, 81, 98, 137, 153, 173, 197, 257, 273, 285, 301, 321, 345, 357, 369, 393, 417, 441, 477, 501, 533, 571, 583. Inoculation of Animals with. De Welz (Dr. R.) Gaz. Méd. July 20, 1850, vol. v, 3rd S., p. 544. Auzias-Turenne (Dr.) Union Méd., August 6, 1850, vol. iv, p. 381. Transmission of from New-born Children to Nurses. Bouchut (E.) Gaz. Méd., April 20, 1850, vol. v, 3rd S., p. 296. Transmission of from Parent to Child, etc. Cazenave (M.) Gaz. de Hôp., Aug. 27, 1850, vol. ii, 3rd S. p. 401. A possible cause of the Death of a Fœtus. Dubois (M. Paul). Gaz. Méd, May 25, 1850, vol. v, 3rd S., p. 392. Constitutional Pains which may coexist with. Diday (M.(*Ibid.*, Nov. 9, 16, 30, and Dec. 7, 1850, vol. v, 3rd S., pp. 806, 820, 856, and 876.

Syphilitic Muscular Retraction. Notta (Dr. A.) Arch. Gén. de Méd., Dec. 1850, vol. xxiv, 4th S., p. 413. Ulcers, Secondary, treated by Diachylon Plaster. Dumas (M. A.) Bull. Gén. de Thér., 1850. vol. xxxix, p. 503.

Tænia, Nervous Symptoms produced by. Legendre (Dr. F. L.) Arch. Gén. de Méd., June 1850, vol. xxiii, 4th S., p. 189. Abs. in Lond. Journ. of Med., Nov. 1850, vol. ii, p. 1073. Kousso and Oil of Male Fern in. Martin-Solon (M.) Bull. Gén. de Thér., 1850, vol. xxxviii, p. 299. Abs. in Lond. Journ. of Med., Dec. 1850, vol. ii, p. 1182.

Tannin in Eye-Diseases. Cambrelin (Dr. J.) Ann. d'Ocul., July, Aug. and Sept. 1850, vol. vi, 4th S., p. 118. Hairion (Dr. F.) *Ibid*, p. 119. Cunier (Dr. F.) p. 121.

Tartar-emetic in very small doses, in certain Thoracic Affections. Bernardean (Dr. E.) Bull. Gén. de Thér., 1850, vol. xxxviii, p. 311.

Tetanus, Idiopathic, cured by Chloroform. Barth (Dr.) Bull. Gén. de Thér., 1850, vol. xxxix, p. 364. Traumatic, Belladonna in. Vial (M.) *Ibid.*, 1850, vol. xxxviii, p. 62. Traumatic, cured by Inhalation of Chloroform. Boraud (Dr. A.) *Ibid.*, 1850, vol. xxxix, p. 126.

Transposition of Heart and Lungs in a Child. Boyer (M. L.) Bull. de l'Acad. de Méd., 1850, vol. xv, p. 589.

Trees, Plantation of, in Towns. Jeannel (Dr.) Ann. d'Hyg. Pub., Jan. 1850, vol. xliii, p. 49.

Tuberculisation, Etiology of. Vanner (Dr.) Bull. de l'Acad. de Méd., Oct. 15, 1850, vol. xvi, p. 68.

Tuberculous Glands in Neck, case of Extirpation of. Coste (M.) Union Méd., August 10, 1850, vol. iv, p. 390.

Tumours, Rapid Development of, under imperfect Febrile Attacks. Liégey (Dr.) *Ibid.*, June 15, 1850, vol. iv, p. 291.

Twin-pregnancy; Dropsy of one Amnios. Saget (M. P.) and Badin d' Hurtebise (M. E.) *Ibid.*, Feb. 9, 1850, vol. iv, p. 70.

Urethra, Function of Bulb of. Guérin (Dr., of Vannes) Bull. de l'Acad. de Méd., Oct. 8, 1850, vol. xvi, p. 49. Hæmorrhage from; its Treatment. Bull. Gén. de Thér., 1850, vol. xxxix, p. 65. Tubercles at various points of. Ricord (M.) Bull. de l'Acad. de Méd., 1850, vol. xv, p. 565. Treatment of Stricture of. Guillon (Dr.) *Ibid.*, 1850, vol. xv, p. 595. Stricture of; Treatment by forcible Dilatation. Civiale (Dr.) Bull. Gén. de Thér., 1850, vol. xxxviii, pp. 165, 396. Fistula of; Treatment by the Urethroplastic Method. Ricord (M.) *Ibid.*, 1850, vol. xxxviii, p. 303, vol. xxxix, p. 255.

Urethrotomy by Scarification and Incision; Analytical and Comparative View of. Reybard (Dr.) Gaz. Méd., Feb. 9 and 23, 1850, vol. v, 3rd S., pp. 109 and 140.

Uterus, Discussion on Diseases of. (Continued from end of 1849.) Huguier (M.) Bull. de l'Acad. de Méd., 1850, vol. xv, p. 351. Dubois (M. P.) *Ibid.*, p. 382. Velpeau (M.) *Ibid.*, p. 412. Recamier (M.) *Ibid.*, p. 421. Hervez de Chegoin (M.) p. 453. Remarks on Diseases of, suggested by the Discussion at the Academy of Medicine. Bull. Gén. de Thér., 1850, vol. xxxviii, pp. 18 and 157. Diseases of, Influence of Diathesis on. Fourcault (Dr.) Union Méd., Jan. 26 and 29, 1850, vol. iv, pp. 45 and 49. Disease of, Indicated by Neuralgia of Loins and Abdomen. Axenfeld (M.) *Ibid.*, April 20 and 23, 1850, vol. iv, pp. 193 and 198. Practical Considerations on Engorgement and Deviations of. Dubois (M.) Gaz. Méd., Jan. 26, 1850, vol. v, 3rd S., p. 63. Engorgements of Neck of, capable of Resolution. Récamier (M.) Union Méd., Feb. 23 and 28, 1850, vol. iv, pp. 93 and 105. Case of Erectile Engorgement of. Récamier (M.) Gaz. des Hôp., Feb. 12, 1850, vol. ii, 3rd S., p. 74. Acute Flexion and Retroflexion of. Malgaigne (M.) *Ibid.*, August 13, 1850, vol. ii, 3rd S., p. 383. Retroversion of, New Method of Treating. Amussat (M.) Gaz. Méd., March 2, 1850, vol. v, 3rd S., p. 159. Fibrous and Fungous Growths in: Cauterisation. Récamier (M.) Union Méd., June 1, 4, 6, 8, and 11, 1850; vol. iv, pp. 266, 269, 274, 278, and 282. Phlegmon of Broad Ligaments of. Nonat (M.) Gaz. des Hôp., Feb. 26, March 5 and 16, 1850, vol. ii, 3rd S., pp. 97, 111, and 129. Abscess of Appendages of, following Course of Round Ligament. Gubler (M. A.) Union Méd., Nov, 12, 14, and 16, 1850, vol. iv, pp. 549, 551, and 555. Abs. in Lond. Journ. of Med., Feb. 1851, vol. iii, p. 173.

Variola, Varioloid, and Varicella. Trousseau and Lasègue (MM.) Union Méd., Sept. 17, Oct. 1, 1850, pp. 454, 478. Variola, Abortive Treatment of, by Collodion. Bull. Gén. de Thér., 1850, vol. xxxix, p. 369. Abs. in Lond. Journ. of Med., Jan. 1851, vol. iii, p. 66. Treated by the External and Internal Use of Milk. Vandezande (M. E.) Union Méd., Sept. 5, 1850, p. 434.

Varioloid, Epidemic of. Simon (M. Max.) *Ibid.*, 1850, vol. xxxix, p. 385.

Vital Force and Innervation, in Relation to the Study of Diseases. Barbier (J. B. G.) Gaz. Méd., March 30, 1850, vol. v, 3rd S., p. 235.

Vitiligo and Hepatic Spots. Cazenave (M.) Gaz. des Hôp., Sept. 17, 1850, vol. ii, 3rd S., p. 437.

Zinc, Painting in, Influence of on Public Health. Bouchut (M.) Bull. de l'Acad. de Méd., Oct. 22, 1850, vol. xvi, p. 78. Poisoning by, among Twisters of Galvanic Coils. Landouzy and Maumené (MM.) Gaz. Méd., June 1, 1850, vol. v, 3rd S., p. 409. Colic from Working in. Bouvier (M.) Compt. Rend., May 13, 1850, vol. xxx, p. 606.

CRITICAL DIGEST OF THE BRITISH AND FOREIGN MEDICAL JOURNALS.

PRACTICE OF MEDICINE AND PATHOLOGY.

HEMLOCK POULTICES AND CALOMEL IN THE ASCITES OF CHILDREN.

In 1849, M. Trousseau tapped four children for Ascites: they all died. From this and similar considerations, he has been led to adopt and recommend calomel in small doses, followed by the application of hemlock poultices to the abdomen.

The calomel is given to the amount of 2½ *centigrammes* (rather less than half a grain) daily, divided into six doses. At the end of six days, at the farthest, salivation takes place; there is also occasionally diarrhœa. The calomel is now discontinued, and hemlock cataplasms are kept constantly applied to the abdomen. These are prepared by rubbing up two spoonfuls of powder of hemlock in some thick linseed-water, which is then spread over a linseed-meal poultice. This is as efficacious as the pure hemlock cataplasm, which is prepared with 200 *grammes* (nearly 6½ ounces) of hemlock powder in a sufficient quantity of hot water. M. Trousseau has long recommended its application to the chest in phthisis.

Under the successive influence of the calomel and the hemlock poultices, the abdominal effusions are absorbed, even under the most unfavourable circumstances. And we may here call attention to a principle which M. Trousseau has derived, we believe, from M. Recamier, and which he never ceases to repeat in his clinical lectures; that, in the treatment of apparently incurable diseases, we should take our stand on a favourable diagnosis, and not assume an irrevocably fatal termination. Pathological anatomy has shewn us the true relations of many diseases supposed to be essential; but it has led us also into an opposite extreme. Hence dropsy always suggests the idea of an incurable organic disease; hæmoptysis that of pulmonary tubercle. Sufficient attention is not paid to the *experientia fallax* of which Hippocrates speaks, and which is specially applicable to diagnosis. All cases of sub-acute peritonitis are not tubercular; there are rheumatic cases —rare, it is true, in adults, but more common in children.

The calomel and the hemlock cataplasms have an absorbent and resolvent effect, even in ascites connected with organic lesion. There was lately a little girl in M. Trousseau's wards, who had had ascites for three months. Nothing abnormal was observed in the heart or liver; but there was reason to suspect the existence of mesenteric tubercles. M. Trousseau prescribed calomel. Salivation took place on the eighth day, and he then applied the hemlock poultices. After fifteen days of this treatment, the fluid was absorbed; and there was felt, in the left flank, a nodulated irregular tumour, of the size of a pigeon's egg, and probably tubercular. The treatment was of no avail against this affection; but it removed the complication, and this is a great step. [*Journal des Connaissances Médico-Chirurg.*, 16 March, 1851.]

MISTAKEN SEX FROM CLOSURE OF THE VAGINA, AND HYPERTROPHY OF THE CLITORIS.

In September, 1850, Dr. Haskins, of Richmond City, U.S., examined, by request, a slave belonging to a gentleman in Mecklenburg County, Virginia, who had been reported as "A Curious Case of Hermaphrodism", by Dr. S. H. Harris, in a communication made to the twenty-seventh number of the *American Journal of Medical Sciences.*

The following is an abridgment of Dr. Haskins' paper as published in the *Stethoscope*:—

I must say, in justice to Dr. Harris, that the examination which I was enabled to make was much more satisfactory than the one from which he made the report. His having been made at a time when he did not expect it, he was unprepared with instruments to assist him, and had also to contend with the reluctance which is usually manifested by such persons to have their real situation known.

Her appearance is that of a woman dressed in man's apparel. Her stature is low, frame delicate, hips broad, lower extremities bent or inclined inwards at the knee-joints, making her *knock-kneed*, gait shuffling, instead of the firm, strong, elastic step of manhood, the face is perfectly smooth, exhibiting no trace of beard, although she is now twenty-one years old. The mammæ although not exhibiting the plumpness of virginity, are as well developed as you ordinarily see them. The *mons veneris* is prominent and well developed, being covered with hair as in the female, and immediately over the symphysis pubis in situated an organ which resembles almost exactly a dwarfish penis. It is about an inch long, and half an inch in diameter, terminated by a tubercle corresponding in shape and appearance with the *glans penis*. There also appears to be the orifice of an urethral canal, properly located in the glans, but upon closer examination it proves to be the terminus of a fissure situated on the inferior surface of the organ, formed by the approximation of the edges of what appears to be the nymphæ, which had adhered to, and were stretched over it, so as partly to contribute to the formation of a preputial covering. The prepuce consisted of that portion of the labia majora which was separated by the root of the organ, as well as the lower portion of the mons veneris. I introduced a silver probe along the fissure before alluded to, to the distance of about an inch, where the fissure terminated by the apparent union of its lips, forming a cicatrix, which resembled somewhat the raphe of a scrotum. This raphe extended to what should have been the position of the posterior commissure of the vulva in the female. I found the orifice of the urethra near this place; and introduced a female catheter into the bladder, when there escaped through it about a teacupful of urine. Withdrawing the catheter and inserting it again, at a point a few lines below the orifice of the urethra, I gave it a direction downwards, instead of that of the urethral canal, and found no difficulty in inserting it its whole length into a cavity where its point could be freely moved in any direction. On taking it out, the lower portion was filled with a dark-coloured fluid resembling blood—the menstrual fluid which had there accumulated. The lower portion of the labia externa presented a rugose, flabby appearance, and with the raphe dividing them, resembled very much a scrotum deprived of testicles. This condition of the labia was doubtless produced by the collection behind them of the fluids escaping from the womb, causing them to act temporarily as the outer walls of a sac containing fluid, the pressure of which varied with the position of the body. I learned from the individual that the escape of fluid from the vagina was irregular, and depended upon the attitude of the body, the only outlet being the small orifice just beneath the urethral opening. There were, however, periodical returns of all those symptoms which accompany menstruation, and so marked as to have attracted the attention of the elder female servants. I also learned that the organ was subject to erections; and that she had desires for the female sex, but had been deterred from attempting connection by an apprehension that her deformity would be discovered.

Thus it appears that this "curious case of hermaphrodism" has been proved to be a case of occlusion of the vagina, accompanied with hypertrophy of the clitoris.

An operation was proposed; but when I stated that it would entirely change the assumed sex, she opposed it with so much earnestness that it was not insisted upon. [*The Stethoscope.*]

SURGERY.

PROFESSOR SYME'S OPERATION FOR TREATMENT OF STRICTURE OF THE URETHRA BY EXTERNAL OR PERINEAL INCISION.

The Treatment of Stricture of the Urethra, by external incision, as advocated by Professor Syme, of Edinburgh, in his pamphlet published in 1849, has called forth the controversial energies of zealous partizans and opponents. In the various communications on the subject, which have appeared in the medical journals, there is much that will repay perusal. The following are the articles most likely to prove interesting :—

Syme, Professor, *Lancet*, Feb. 17, 1849 ; April 20, 1850 ; May 18, 1850. (The latter article contains Mr. Syme's challenge to the London surgeons to send him a case of *impermeable* stricture.) Cases in *Lancet*, January 25 and Feb. 15, 1851. Mr. Syme's views were fully laid before the readers of the London Journal of Medicine, p. 35, vol. for 1850.

Fergusson, Professor, Case with Lithotomy. *Lancet*, Feb. 16, 1850, and May 11, 1850.

Smith, Mr. Henry. *Medical Times*, Sept. 15, 1849, May 4 and 25, and June 1, 1850.

Partridge, Professor. *Lancet*, April 13, 1850.

Cock, Mr. Edward. *Lancet*, June 29, 1850.

Wade, Mr. Robert. *Lancet*, January 26, 1850.

Lizars, Mr. John. Cases Illustrating the Failure of the Operation for Perineal Section. *Medical Times*, October 26, 1850.

Professor Miller has published in the *Lancet* for March 22, 1851, a paper lately read by him before the Medico-Chirurgical Society of Edinburgh. It is an excellent essay ; and contains a fair summary of the arguments for and against Mr. Syme's operation. As Professor Miller has disentangled the subject from many offensive personalities, with which others had overlaid it, we hope in future to see it properly discussed.

The author commences by referring to the fact, that perineal incision had long been practised and recommended by the late Sir Everard Home, by Sir B. Brodie, Dr. Jameson of Baltimore, the late Mr. Liston, and other eminent surgeons. He quotes passages from their writings to shew that this opera- "has not wanted the sanction of good surgeons. At the same time, it is worthy of note, that the operation is spoken of as sometimes difficult, by no means free of danger, and not warrantable unless the other and more ordinary means of cure have been tried, and found ineffectual." Mr. Miller has himself had occasion to resort to this procedure in two cases ; in one, the patient died, on the nineteenth day after the operation, of pyæmia, which was at the time prevalent in his wards ; in the other, the patient recovered.

He then proceeds to discuss the peculiarities in the modification of the operation lately proposed and practised by Mr. Syme. These are twofold :— 1. "An instrument is passed through the stricture, on the groove of which instrument, as a director, the stricture is divided. 2. The operation is *extended* to other cases than those which have actually proved intractable by other and gentler means ; rating the operation as one of *expediency*, in some measure, rather than of absolute *necessity*."

The first-mentioned peculiarity implies that *all strictures are permeable*, not only to urine outwards, but also to an instrument inwards. Mr. Miller observes, that most authorities agree that actually impermeable strictures are very few ; but that there is indisputable evidence of their occasional occurrence, as appears from the writings of Sir C. Bell, Mr. Liston, Baron Dupuytren, and Mr. Syme himself ; who, in the *Monthly Journal of Medical*

Science for 1844, published some cases of stricture, in one of which he mentioned, that "the smallest probe could not be passed". Having thus established the fact of the occasional occurrence of impermeable stricture, Mr. Miller makes the following judicious remarks :—

"The term 'impermeable stricture' seems to be an equivocal one. No stricture need be impermeable ; all may be forced, but with the risk of a false passage, and serious risks ensuing. A provincial surgeon, of great experience, used to boast that no strangulated hernia had ever resisted his hands ; with him the taxis never failed ; all cases were, to him, reducible. But such was dangerous practice ; and it seems to me that a similar risk must attach to the maxim, "all strictures are permeable". The student and young practitioner may be taught, that to fail with the instrument must always be a sign of deficient dexterity ; and, in consequence, they may be tempted to such a rashness of procedure as has been well deprecated by Sir Charles Bell. (*Surgical Observations*, p. 57.)[1] . . . Besides, a stricture which is at one time impermeable may, by spontaneous change, irrespective of all treatment, become permeable. An example of this is afforded by Mr. Syme, when he says that a case of stricture, which had been under the care of Mr. Liston, in the North London Hospital, and had obstinately refused to yield to that surgeon's efforts to pass an instrument, afterwards came under his own care in the same charity : and that he succeeded in passing an instrument into the bladder. Putting the manual dexterity, tact, experience, and general accomplishment of Mr. Liston and Mr. Syme on the same level,—an arrangement to which the latter gentleman will not object,—it follows that the stricture, at one time impermeable, at another time had ceased to be so, independently of curative treatment.

"On this part of the subject my belief is, that some few strictures there may and will be found, which are not, or ought not to be, permeable ; and that in these, rather than encounter risk by forcible propulsion of the instrument, it were better to perform the old operation."

With regard to Mr. Syme's extension of the operation of perineal section, Mr. Miller remarks that it is warrantable in such permeable examples only on two grounds ; first, that the cure will thus be rendered more rapid and certain than by other means ; secondly, that the plan of procedure is equally safe.

Mr. Syme's plan, the author thinks, is undoubtedly more rapid, but not more certain, in most cases of permeable stricture, than the rightly conducted treatment by instrumentation. Here he calls attention to two modes of using the catheter and bougie, well adapted to the final subjugation of cases even of great obstinacy ; viz. (*a*), the method of *tunneling*, as it may be called, by which the stricture is gradually penetrated by successive introductions of a No. 5, 6, or 7 bougie, made somewhat conical at the extremity, and allowed to remain for a longer or shorter time, according to the feelings of the patient ; and (*b*) tying in the catheter for forty-eight hours or thereabouts, a method well suited to gristly and resilient stricture : on withdrawing the catheter, a bougie of medium size may usually be introduced with comparative ease, and dilatation may be proceeded with. If it be objected that the tying in of the catheter is an irksome and formidable proceeding, the answer is obvious,—that no more is done, in this respect, than what is practised after perineal section ; and surely retention of the catheter for forty-eight hours is less formidable without than with a perineal wound.

In reply to the objection that "strictures so treated are prone to relapse", Professor Miller makes the following pertinent remarks. "In almost all cases, such relapse is not the fault either of the surgeon or of his system of

---

[1] "Of course I do not mean to infer that Mr. Syme practises the forcing of strictures, but only to express my fear that the unqualified enunciation of the maxim, 'all strictures are permeable', may lead the younger members of the profession to this procedure."

treatment, but of the patient himself. After having obtained half a cure, he grows irregular in his attendance, resumes careless living, perhaps lapses into dissipation, and does not return to regular treatment until recontraction of the urethra has warned him of his folly and risk. But let the dilatation be completed, till a full-sized instrument has on many occasions passed the whole canal unopposed; then let occasional introductions be maintained at gradually lengthening intervals, at the same time the general health, and especially the function of the kidneys, being carefully attended to;[1] and I believe that, under these circumstances, tendency to unusual resiliency and relapse will be sought for in vain. In other words, I believe that, in most cases of stricture, as perfect and permanent a cure may be obtained in this way as by any other means of treatment, however heroic that may appear."

As to the *safety* of the operation, Mr. Miller does not question that it has been safe in Mr. Syme's experience, but observes that "fatal results *have* occurred in other hands, both in London and Edinburgh. And it is not easy to see how a certain amount of risk can be avoided in such an operation. 1. By hæmorrhage. No doubt the safety here is to cut in the centre, and only in the condensed and solidified tissues which compose the stricture. 2. By urinary infiltration; and we know that very little of this may prove fatal, the urine acting as an intense poison on the system. 3. By abscess in or near the wound, leading perhaps to fistula, and irritative or hectic fever ensuing. 4. By intra-pelvic abscess. 5. By erysipelas. 6. By pyæmia."

The following are the general conclusions drawn by Professor Miller:—

"1. Most strictures are permeable; the great majority of these are curable by other and safer means than perineal section; and the metallic bougie and catheter, when rightly used, are neither so injurious nor so inefficient as Mr. Syme has represented them to be. 2. Permeable strictures, which refuse to yield to cautious and correct instrumentation, combined with suitable general treatment—strictures, also, which yield in part, but speedily and pertinaciously relapse—and strictures which are so impracticably irritable as absolutely to interdict the use of instruments, even with the aid of chloroform, opium, Indian hemp, nitrate of silver, etc.—such strictures may and ought to be treated by perineal incision, after the manner of Mr. Syme; *but such strictures are very few.* I may add, that strictures which, though bad, do not yet come altogether within the preceding category, may be subjected to perineal incision, when *time* happens to be an element of great importance; where the patient, for example, is a labouring man, and anxious to be as short a time as possible laid aside from the maintenance of his family. 3. Those strictures which are impermeable,

---

[1] "Mere handiwork will not succeed in stricture any better than in other complaints. There is no "*pure* surgery"; at least there ought not to be. The department of the surgeon is medico-chirurgical, not simply chirurgical; and every practitioner knows, that in no class of diseases is the aid of *medical* science more valuable, and indeed essential, than in those of the urinary organs. Many strictures may be prevented, and some may be cured, by medical treatment alone. And I have a dread of the terms "pure surgeon" and "pure surgery", as operating on the mind of the student; leading him, it may be, to neglect or despise that part of his professional accomplishment, without which he were but a fit representative of the barber-surgeon of a less enlightened day." [We are heartily glad to find so eminent a surgeon as Professor Miller thus strongly opposing the absurd idea, that there can be such a being as a "pure surgeon", or such a thing as "pure surgery". As the improvement of our profession advances, the day will probably arrive, when a "pure surgeon" will be thought of as an almost fabulous monster of antiquity; but, in the mean time, we must, with Mr. Miller, protest against the use of such terms, as they are liable to mislead the student, and cause him to neglect opportunities of acquiring indispensable knowledge, which can never be regained. EDITORS OF LOND. J. OF MED.]

or ought to be considered such—and they may be expected to prove still fewer—should be treated by perineal section after the old method."

As to Mr. Syme's monograph, Mr. Miller observes :—

"1. That, while he has overstated the risk attendant on the use of the metallic bougie and catheter in the treatment of stricture, he has underrated their efficiency. 2. That the operation proposed by him is admirably adapted for certain specified cases ; few in number. 3. That it is not applicable to all cases intractable by other means ; there being some strictures which are actually, or which should be considered to be, impermeable. 4. That the operation is not devoid of danger. 5. That progress towards cure thereby is not always smooth and uninterrupted. 6. That the operation will be found not always, and probably not often, sufficient of itself to cure. 7. That subsequently to the operation, instrumentation is required in the usual way ; the main use of the incision being, besides diminution of morbid irritability, to give the practitioner a good *start* in the use of the bougie, as after tying in a catheter. 8. When cure is completed, by instrumentation following on incision, dilatation may be expected to prove permanent ; inasmuch as such cure may not depend on mere expansion of the primal canal, but on something like reproduction of a portion of the urethra at the enlarged part..... The ordinary tissues at the part may be condensed, changed, and invested by a membranous lining, so as to cure the constriction by not merely dilating the old canal, but by *patching*, or *letting in* a new portion. Towards this end, however, it is very obvious that the use of the bougie, subsequently to the operation, is quite esssential.

"Or, further to condense, I believe :—1. That Mr. Syme's operation is a good operation, and an important addition to operative surgery, applicable to certain bad, very bad, strictures, which, however, are likely to prove, in the hand of a surgeon who practises all the departments of his art, and practises them all well, extremely few. 2. That those bad strictures, which are still worse, being impermeable, should be cut in the old way, and that such strictures are likely to prove still fewer. 3. That all other strictures—and these constitute a vast and overwhelming majority of all strictures—should be treated by instrumentation (catheter or bougie) variously employed, without incision."

MR. JOHN WALKER ON THE TREATMENT OF STRICTURES BY CAUSTIC POTASH.

The *Edinburgh Medical and Surgical Journal* for April 1851 contains a memoir, by Mr. W. Brown, of the late Mr. John Walker of Edinburgh ; from which we copy the following extract of a letter by Mr. Walker, relating to the use of Caustic Potash in Stricture. The date of the letter is 19th Feb. 1824.

".... The caustic used is potassa, which should be as perfect and uninjured as possible by the air's action. It must be reduced to fine powder in a small china mortar. To this add from a third to two-thirds of Spanish soap, also in powder. After incorporating them, a little soft water must be cautiously and gradually added, till it gets to the consistence of a paste or soft mass for pills ; it must then be put into a small wide-mouthed phial, firmly corked or stopped. I sometimes add a small quantity of very pure and finely-powdered opium, previously rubbing it with the soap ; but whether with any advantage, I cannot say. It will be well not to prepare much of the paste at once. I seldom prepare above a drachm or a drachm and a half at one time.

"In using it, take a small portion out with a silver knife or probe, and put it upon a bit of soft leather, which rub upon the holes of the instrument, till they are filled. Then wipe it clean with a soft rag, that the paste may be nowhere but in the holes. It must then be oiled, and introduced, with as much quickness as the feelings of the patient will permit, down to the

stricture, which you must now *enter;* and, after remaining a few seconds within it, move gently backwards and forwards three or four times, taking care not to go, if possible, beyond the limits of the stricture. After withdrawing it, I sometimes used to inject a syringe-full of warm oil, which soothes the parts; and generally give an opiate, which is preferable *per anum*, by means of a small one-ounce syringe, which will convey one ounce of mucilage, and 40 or 80 drops of laudanum, with great ease.

"Before introducing the caustic instrument, it will be proper to pass a full-sized common or silver bougie down to the stricture, but not to pass it. This widens the passages, removes spasm, and facilitates the introduction of the other.

"Should much pain, irritation, or suppression, take place from the use of the caustic, I need not say fomentations to the perinæum, and opiate clysters, will be required, with camphor mixture, three or four times a day.

"The slough produced by this caustic is quite different from that by the nitrate of silver. The latter is a tough tubular membrane; while by *this* it is gelatinous and bloody, as it acts at once, and dissolves the stricture, particularly if it is spongy and tender; of which we can readily judge by the feel in passing, by its bleeding readily, and by its being accompanied by a puriform discharge. When it is in this state, the potash acts powerfully, and brings away a great deal of gelatinous brownish slough.

"After the lapse of a few days, it may be well to examine the stricture by the bougie, so as to ascertain if you have gained ground, and determine both the propriety of another application, and the size of the instrument to be employed; because a single application may have been sufficient to put the stricture in a state to be afterwards managed by the bougie. At the same time, as this mode requires the instrument to be firmly grasped by the stricture, in order to its effectual action, we must enlarge the instrument as we gain upon the stricture; but we must also guard against undue irritation from the too frequent or too severe application of the caustic, and use as little of it as we can, till we know more of our patient, and what he can bear. Indeed, at all times, as a general maxim, I would say, never use the caustic when you can do your purpose by the bougie, though I know most strictures of long standing will not do without a few applications of the caustic; then the bougie acts with the utmost advantage, after the diseased surface is removed, which is the business of the caustic, not of the catheter.

"I have often been surprised at the effects of a single application of caustic, when I have not had an opportunity of examining the patient for two or three weeks after it has been used, and when, therefore, all irritation and swelling have left the parts. This should lead us not to be too hurried in renewing our applications; for, till the swelling subsides, we never can know what we have gained, and we had better act with caution. Though some recover much sooner than others, I should say a week is the usual time.

"I do not think the caustic acts so readily upon healthy parts as the nitrate of silver. If, after one or two applications, therefore, you find the instrument, when withdrawn, clean and without slough, I should be disposed to consider the parts much improved, and perhaps not requiring the use of more caustic.

"After withdrawing the instrument, it should be cleansed from slough, as well as caustic, by dipping it in hot water, and, with a bit of pointed wood, or tooth of a comb, cleaning the holes; and this will be completed by the aid of a brush, so as to remove all remains of caustic. The instruments are covered with leather slips, which I have used for many years. Too great attention cannot be given to preserve the polish of the instrument; the slightest touch is like a file to the delicate membrane."

[Mr. John Walker was a Fellow of the Royal College of Surgeons in Edinburgh, and was long a well-known practitioner in that city. He was

born in 1776, and was the son of Dr. John Walker, who was for several years Treasurer of the Royal College of Surgeons. After attending the lectures at the University of Edinburgh, and the practice of the Royal Infirmary and the Public Dispensary, he repaired to London in 1787. While there, he became a pupil of Cruickshanks, and subsequently of John Hunter. Of the latter he speaks, in his letters to his father, in terms of admiration; but with regard to the other lecturers, he appears to have been greatly disappointed, regarding the demonstrations of Mr. Cruickshanks as being "very confused, dry, and unmethodical, and far inferior to those of Monro". Mr. Walker was made a Fellow of the Royal College of Surgeons in Edinburgh, 15th September 1791. After practising in that city for many years, he died at Moffat in 1841, having for several years retired from the active duties of his profession.]

WILMOT ON STRUMOUS URETHRITIS.

In an instructive essay on some Affections of the Male Urethra, published in the *Dublin Quarterly Journal of Medical Science* for February 1851, Dr. S. G. Wilmot calls attention to a disease to which he gives the name of Strumous Urethritis. The symptoms are a constant discharge of watery matter, resembling whey, from the urethra, and a tickling or hot sensation in passing urine. These symptoms are heightened by drinking spirits, by sexual intercourse, or by exposure to wet, cold, and fatigue; and frequently an attack resembling acute gonorrhœa supervenes without any assignable cause. The lips of the urethra have a pouting appearance; they are not, however, circular as in gonorrhœa, but appear flattened laterally. The mucous membrane, as far as can be seen, resembles very closely the state of the palpebral conjunctiva in granular ophthalmia; and Dr Wilmot believes that this condition extends as far as the bulb. On introducing a No. 8 bougie or catheter, pain is felt all along the passage, but especially at the bulb, where there is generally a soft spongy obstruction, capable of being surmounted by a little pressure on the instrument.

Dr. Wilmot looks on this affection as essentially strumous: and in a case which he recently had under his care, the patient had also strumous disease of both testicles. The disease, though independent of gonorrhœa as its cause, is very frequently preceded by that specific complaint, which glides gradually into it through the medium of gleet. A case of protracted gleet, in a person of well-marked strumous disposition, may therefore be expected to merge into the slow and obstinate disease just described.

When the disease is allowed to progress, the bladder very frequently becomes engaged; its irritability becomes increased, and there is a large deposit of pus in the urine. Dr. Wilmot has not had an opportunity of ascertaining whether the mucous membrane of the bladder presents the granular appearance; but he thinks it a rational conjecture that such is the case.

The urine is generally neutral; often slightly acid, and sometimes faintly alkaline: pus-globules are always detected by the microscope. It is often slightly albuminous; but it is difficult to determine whether this is from pus, or from the kidneys. Dr. Wilmot believes, that patients who have been long tormented with strumous urethritis ultimately die of renal disease.

In the treatment, Dr. Wilmot recommends the occasional introduction of a bougie, smeared, if there be not too much irritation, with some astringent ointment, especially the acetate of lead ointment. We may also employ injections of zinc, alum, or copper, or nitrate of silver; but Dr. Wilmot prefers the decoction of oak-bark, either plain, or with two grains of alum to the ounce. A little opium may be added, if there be pain or much irritation.

For the constitutional treatment, it is well to administer at first Plummer's pill and the iodide of mercury in small doses: but should the patient exhibit very marked scrofulous features, iodide of iron should be at once given.

Either of these medicines should be combined with extract of hemlock. Two grains of iodide of iron, and the same quantity of extract of hemlock, given three times daily for some time, have proved very beneficial. Nitro-muriatic acid may afterwards be given in decoction of bark or sarsaparilla. Sea-bathing, if the patient's health admit of it, should be regularly observed, and a generous system of diet ordered: ardent spirits, sexual connexion, over-exercise, and any other thing which increases the irritation, should be sedulously avoided. Where balsams and turpentine are persevered in, with the vain belief that the case is one of common gleet, the symptoms never fail to be aggravated.

NOCTURNAL ENURESIS TREATED BY APPLICATION OF NITRATE OF SILVER TO THE NECK OF THE BLADDER.

Dr. Demeaux has related, in the *Gazette des Hôpitaux*, some cases of nocturnal incontinence of urine occurring in adults, which he has successfully treated by one or more applications of nitrate of silver to the neck of the bladder. This remedy is probably very advantageous in incontinence of urine in puberty or adult age, for the affection is then of long standing and obstinate. But it would be barbarous to have recourse to this treatment in children, for whom belladonna is generally sufficient.[1] If this fail, we can still cauterise the urinary meatus, before proceeding to the operation on the neck of the bladder, which is not unattended with pain. [*Journal des Connaissances Médico-Chirurg.*, 1st March 1851.]

OBSTETRICS.

PROFESSOR SIMPSON ON REFLEX SENSATIONS CONNECTED WITH UTERINE DISEASE.

We quote, with slight abridgement, the following very lucid and instructive explanation of the so-called Sympathetic Pains which attend Uterine Diseases, from a clinical lecture by Professor Simpson in the *Edinburgh Monthly Journal* for February 1851.

The various pelvic symptoms (pains, difficult defecation or micturition, etc.) are, in some instances, mechanical in their pathology; in other instances they are sympathetic results. They may be present, and strongly marked, when the uterus is not unnatural in size or in position. In these instances (perhaps the more numerous class) we speak of the resulting disturbances of function, and increased sensations, as sympathetic or reflex; that is, as originating in an irritation primarily seated in the uterus and uterine nerves, but terminating and felt, secondarily, in the sensitive nerves of those other neighbouring parts which are affected.

In diseases of the uterus and its appendages, the principal pains and sufferings are often not located in the uterus or pelvis, but in other parts of the body, forming an important series of dynamic symptoms.

Sympathetic Pains in Different and Distant Parts of the Body. These sympathetic pains, or neuralgiæ, are often so marked as to draw away the attention of the patient, and even of the practitioner, from the real nature and seat of the malady.

Reflex motions are excited by excitation upon distant mucous and cutaneous surfaces, the impressions being conveyed by a nervous arc (which always passes through the spinal cord) to those muscles which are ultimately set into contraction; and these muscles may be situated in remote parts of the body. Morbid sensations, Dr. Simpson believes, originate often in the

[1] See London Journal of Medicine, January 1849,

same way; and we can as truly speak of reflex sensations as of reflex motions. A severe pain in the knee-joint frequently accompanies the early stage of morbus coxarius; and this pain cannot be explained on any mechanical principle, or by reference to any swelling in or around the diseased joint, compressing the nerves which supply the knee. The sympathetic or reflex pain occurs most generally in the commencement of the disease, when the lining membrane merely of the hip-joint is as yet affected, and when there is little or no swelling or effusion. An impression or excitation is conveyed from this affected membrane by the nerves which are distributed to it, and this impression is probably conveyed by them upwards as high as the spinal cord; and then another impression would seem to be reflected or conveyed downwards from the cord along another set of nerves,—viz., along the branches of those which are ultimately distributed to the knee-joint, the immediate seat of the so-called sympathetic pain. Or we may state the matter more correctly, by saying that the trunk of the nerve, going to the knee, has a morbid sensitive impression made on it somewhere during its course, as it passes through one of its higher plexuses, or at its origin in the cord itself, producing a change in it as if its own branches in the knee were painfully affected. Irritation of the mucous membrane of the bladder often gives rise to sympathetic or reflex pains in the orifice of the urethra, and along the course of the lower extremities. The small, red, granular, and very painful sensitive tumour, which sometimes grows at the orifice of the female urethra, is occasionally accompanied with distressing pain in the heel and sole of the foot. When the uterus is distended and irritated in pregnancy, the patient often complains of reflex or sympathetic pains in the lumbar region, in the mammæ, in the nerves of the teeth, etc. When the uterus is the seat of actual disease, such reflex pains are often very marked, and, at the same time, they are apt to deceive and mask the original and primary disease. The dependence of the reflex or sympathetic pains in uterine diseases upon the uterine irritation itself, as their primary source, is best seen in cases of displacement. By restoring a displaced uterus to its natural position, even though only temporarily, the attendant sympathetic effects are generally moderated or entirely removed. We cannot have the same precise proof in other uterine diseases, as ulcer, cancer, etc., because we cannot at once remove the primary irritation.

The following are the principal sympathetic pains under which patients, suffering from uterine disease, are liable to complain. They are enumerated, as far as possible, in the order of their frequency.

Pain in one or both Mammæ is very common in many forms of uterine irritation. It is often accompanied by some degree of swelling or tension in the gland; and occasionally the areola becomes somewhat darker and changed, as in pregnancy. These symptoms are particularly liable to be increased at the period of menstruation. If a patient complain of pain in the mamma, without evident local affection, the inquiry should always be directed to ascertain whether some diseased action is not going on in the uterus.

Pain under the Left Mamma, and upon the edges of the ribs of that side, is also very frequent, perhaps even more so than pain in the mamma itself. Dr. Simpson is inclined to believe it more common in uterine or ovarian disease in the unmarried, than in the married. It is probably as frequent in cases of uterine affections, as pain in the shoulder is in cases of hepatic affections. This pain under the left mamma is sometimes diffused along the side, but more usually it is limited, and the patient will say that she thinks she could cover the whole of the pained spot with a crown-piece. When not severe, it is not affected by respiration; but in more severe cases, it is increased by deep inspiration; and many a patient has been bled and leeched, etc., over and over again, under the idea that the pain was an indication of pleuritic inflammation, when, in fact, it had nothing to do with pleurisy, or any disease of the chest.

Pains in the Right Side, or right hypochondriac region, are much more rare, but are still sometimes to be met with.

Pain in some of the Vertebræ, imitating spinal irritation, is often also an accompaniment of uterine inflammation, and is not unfrequently combined with the pain under the left mamma. The patient principally complains of it when the part is pressed. Many suffering from these sympathetic vertebral pains, in consequence of uterine derangement or disease, have been laid up and counter-irritated with the moxa, cautery, etc., under the idea that there was actual spinal disease present.

Pain in the Lumbar Region, or in the Lumbar and Sacral Regions combined, is especially common as a sympathetic morbid sensation in uterine diseases, but particularly in those which consist of any displacement or enlargement of the organ. The great sacro-lumbar pain, which the woman in labour suffers in the same part, is itself entirely a reflex or sympathetic pain of the same character.

Pains in the Abdominal Parietes occasionally occur. Sometimes they are limited to one side, occupying the site of the ascending or of the descending colon. Occasionally they are confined to a limited spot. But, in other instances, the whole surface of the abdominal walls is tender and neuralgic. When this is the case, there is often also a greater or less degree of tympanitis, so as to suggest the presence of acute peritonitis, or of serious enlargement and organic disease of some abdominal organ. In some cases, the apparent tenderness is so great that the patient timidly shrinks under the least touch, and is even terrified at the approach and pressure of the hand of the practitioner.

Pains in the Extremities and Joints are sometimes secondary morbid results when the primary irritation or disease is seated in the uterus. Pain, stretching from the loins or pelvis downwards, along one or both of the lower extremities, is a very common symptom in uterine disease. In ovarian enlargement there is sometimes (particularly in the earlier stages of the disease) a morbid sensation of numbness and pricking in the corresponding limb ; but this effect is probably mechanical, the consequence of pressure upon the nerves of the limb. Under the name of hysterical knee-joint, surgical authors describe a painful affection of that part, occasionally accompanied by swelling and apparent effusion, and which has often been mistaken for the common white-swelling. The pain, and other symptoms, are so chronic and so marked, as sometimes to have led the surgeon to amputate the limb for supposed incurable disease of the joint. Dr. Simpson is well assured, that in these cases the pain in the knee is almost always a secondary or reflex pain ; and that the primary source of irritation will be found in some distant organ—very often, indeed, in the uterus or ovary. Similar pains in the other joints of the extremities are rarer, but are not altogether unknown. Dr. Simpson has had a patient suffering under chronic inflammatory ulceration of the cervix uteri, with profuse purulent discharge, and much pain and tenderness in the vaginal canal. But there was still more severe pain and tenderness of the skin and tissues over the head of the right radius. It sometimes deprived the patient of rest ; and she maintained that it decreased and increased in correspondence with the changing state of the uterine irritation and discharge.

Pains in the face and head may also occur. Toothache, as a sympathetic pain, occasionally occurs during pregnancy ; but Dr. Simpson has not had occasion to trace its connexion with uterine disease. Local and limited pains, as over one or the other eyebrow, in the forehead, in the occiput, in the temple (*clavus hystericus*), etc., sometimes appear to be the secondary consequences of uterine irritation. The headaches, however, under which uterine patients often suffer, are more frequently results of anæmia or functional derangement than of reflex or sympathetic sensation.

[The doctrine of *reflex sensations,* (so clearly expressed and illustrated in

the above,) is thus enunciated by Dr. C. J. B. Williams, in his *Principles of Medicine*, 2nd edition, p. 98, London: 1848:—

"Clinical observation teaches us that not merely motory impressions, but also those which cause sensations, may be reflected, so that when the impression is made on one part, the sensation is experienced in another. I do not allude to the fact that a stroke on the nervous trunk produces feelings referred to its branches, but I advert to impressions on the ultimate distribution of one nerve producing sensations in parts supplied by another nerve, or by another branch of the same nerve. . . The sensations cannot be referred to direct nervous communication, but to an influence reflected, probably from the spinal centre only."]

PLACENTA ADHERENT TO THE SCALP OF A MALFORMED FŒTUS.

Dr. Fletcher described this case, and exhibited the fœtus to the Birmingham Pathological Society. It is detailed in their *Ninth Report*, p. 33. The placenta adhered to the scalp, by a large portion of its membranous surface. The frontal and parietal bones were absent; the brain and membranes were healthy, and not unnaturally connected with the scalp. The nasal bones were absent; the alæ nasi separated for half an inch; the left nostril was open to the head. The left eye was small; the palpebral opening only three-eighths of an inch long; the right eye so small as to be hardly felt; the palpebral opening was obliterated. The upper lip was cleft. The left toes and fingers were defective. The age of the fœtus was eight months.

PLACENTA ATROPHIED AND CONTAINING CLOTS, IN A CASE OF ABORTION.

A healthy young woman, the mother of five children, who had never before aborted, aborted at the seventh month, six weeks after receiving a slight injury in the abdomen. Mr. Bindley exhibited the placenta to the Pathological Society of Birmingham; and in their *Ninth Report*, p. 36, it is thus described. "It was irregularly lobulated; one of the lobes contained a large coagulum; another portion was doughy and contained blood extravasated into its vascular network, which was degenerated into a pulpy mass. The whole organ was atrophied. The funis was thin; the vessels pervious."

MATERIA MEDICA AND PHARMACY.

TURPENTINE CONFECTION: COOKE'S FORMULA.

A Transatlantic cotemporary, the *Western Journal of Medicine and Surgery*, says that the following paste or confection, as prescribed by Professor F. E. Cooke, often succeeds as a diuretic when all others fail. "It is also very useful in diseases in which the mucous membrane is involved. There is a species of hoarseness which follows inflammatory affections, and which often approaches aphonia, in which this paste is a very valuable remedy." The following is the formula:—Castile soap, ʒiv; spermaceti, ʒviij; Venice turpentine, ʒvj; oil of aniseed, ʒiij; turmeric, ʒij; honey, q. s. Rub the soap and spermaceti well together, add the turmeric; after rubbing them well together, add the turpentine and oil of aniseed; and then sweeten with the honey. *Dose.* A piece the size of a nutmeg is given two or three times a day.

SEED OF THE WATER-MELON (CUCUMIS MELO).

Dr. Hook of St. Matthew's, South Carolina (U. S.), bears strong testimony to the value of the seed of the water-melon as a diuretic. He recommends that two ounces of the seed be bruised, and a pint of boiling water poured upon them. Three or four ounces prove diuretic and demulcent. (*Boston Med. and Surg. Journal*, from *Charleston Med. Journal.*)

THE HOSPITALS OF LONDON. No. V.

BY DR. CORMACK AND DR. SEMPLE, ASSISTED BY NUMEROUS REPORTERS.

LONDON HOSPITAL.

PHYSICIANS. Dr. F. Cobb, Dr A. Frampton, Dr. W. J. Little.
ASSISTANT-PHYSICIANS. Dr. Jonathan Pereira, Dr. P. Fraser, Dr. Herbert Davies.
SURGEONS. James Luke, Esq.; John Adams, Esq.; T. B. Curling, Esq.
ASSISTANT-SURGEONS. G. Critchett, Esq.; N. Ward, Esq.; J. C. Wordsworth, Esq.

THE LONDON HOSPITAL, which now stands in the Whitechapel Road, was originally opened under the title of the "London Infirmary", in the City Road, on November 3, 1740; but was removed to Prescot Street, Goodman's Fields, in the following April. The sphere of its operations having rapidly increased, the name of the institution was changed seven years after to that of the "London Hospital"; and, in 1752, the foundation of the present building was laid by Admiral Sir Peter Warren, Bart. In the beginning of 1758, it was opened for the reception of patients; and on the 9th December in the same year, the governors received a charter of incorporation from his Majesty George the Second.

This Hospital is situated nearly in the centre of the Tower Hamlets, a borough containing a population of about 400,000, and is in the vicinity of the Docks and some of the most important and extensive manufactories of the metropolis. From this circumstance it arises, that a large proportion of the cases which come under treatment are *accidents;* the docks giving, on an average, one accident a day. The London Hospital may therefore be considered as the great *surgical* hospital of the metropolis. It contains four hundred beds, which are thus classified, viz.:—

Male Accidents	130
Do. Surgical cases, not being accidents	40
Do. Medical cases	63
Female Accidents	35
Do. Surgical cases, not being accidents	33
Do. Medical cases	44
Hebrew Wards (Male)	11
Do. Do. (Female)	10
Children under seven years	20
Attics—for cases of Fever or Delirium tremens	6
Operation Wards (Male)	4
Do. Do. (Female)	2
Extra Do. for Male or Female as required	2
	400

Owing to the large proportion of accident cases received, the number of patients under treatment in the house at one time varies very considerably, it having ranged in one year from 253 to 396. During the year 1850, the average number of patients in the house was 320.

The following is a table of the number of accidents admitted during the years 1842—50, both inclusive.

Years.	Fractures.	Wounds.	Contusions.	Sprains.	Dislocations	Concussions.	Burns and Scalds.	Hernia.	Bites of Dogs.	Suicidal attempts and Poisoning.	Various.	Totals.
1842	840	1042	2141	567	97	52	265	75	58	38	328	5503
1843	899	1036	2122	592	111	48	327	65	52	46	368	5666
1844	1003	1344	2243	660	86	46	322	52	43	36	266	6102
1845	952	1361	2681	663	108	32	360	46	51	32	269	6555
1846	954	1384	3092	624	119	44	423	63	52	30	234	7019
1847	1052	1879	3362	847	110	51	462	76	64	18	356	8277
1848	1003	2562	3529	875	121	45	422	89	92	41	237	9016
1849	1050	2413	2975	892	103	72	426	68	99	30	883	9011
1850	1084	2598	3444	1040	112	39	429	65	101	25	262	9199
Total	8837	15619	25589	6760	967	430	3436	599	612	296	3203	66348

The following is a statistical account of the accidents brought to the London Hospital during the year 1850.

Admitted as In-patients, 2222	In-patients, Male, 1670	Out-patients, Male, 4865
Treated as Out-patients, 6977	„ Female, 552	„ Female, 2112
Total during the year, 9199	Total, In-patients, 2222	Total, Out-patients, 6977

Consisting of the following cases :—

	No.	In-patients.			Out-patients.		
		Male.	Fem.	Total.	Male.	Fem.	Total.
Fractures	1084	391	111	502	376	206	582
Wounds	2598	343	94	437	1569	592	2161
Contusions	3444	571	195	766	1854	824	2678
Sprains	1040	97	28	125	619	296	915
Dislocations	112	16	1	17	69	26	95
Concussions	39	35	2	37	2	..	2
Burns and Scalds	429	86	71	157	160	112	272
Hernia	65	26	18	44	14	7	21
Bites of Dogs	101	8	1	7	72	22	94
Attempts at Suicide and Poisoning	25	6	17	25	..	..	..
Various	262	91	14	105	130	27	157
Total during the year	9199	1670	552	2222	4865	2112	6977

The fractures consisted of the following cases :

	In-Patients.	Out-Patients.	Total.
Skull	9	—	9
Face	18	6	24
Spine	4	—	4
Ribs	119	39	158
Sternum	—	—	—
Pelvis	1	—	1
Thigh	53	10	63
Patella	15	—	15
Leg	177	4	181
Foot	16	2	18
Shoulder-bone	5	—	5
Collar-bone	9	142	151
Arm	31	67	98
Fore-arm	27	227	254
Hand	18	85	103
Total	502	582	1084

Report of the 2222 In-patients.

	Discharged Cured.	Died.	Remain in Hospital.	Total.
Fractures	395	32	75	502
Wounds	399	14	24	437
Contusions	720	14	32	766
Sprains	120	1	4	125
Dislocations	17	..	..	17
Concussions	33	4	..	37
Burns and Scalds	107	19	21	157
Hernia	30	9	5	44
Bites of Dogs	6	1	..	7
Attempts at Suicide and Poisoning	20	4	1	25
Various	29	6	10	105
Total	1936	114	172	2222

Of the 114 deaths, 13 occurred on the first day of admission, viz. :—

Fractures	4
Wounds	1
Contusions	2
Concussions	3
Burns	3

Total deaths 1st day	13
„ 2nd „	18
„ 3rd „	17
„ 4th „	8
„ 5th „	7
„ 6th „	2
„ 7th „	4
Total deaths in 1st week	69

Of the 9199 cases of accidents admitted during 1850, 2222 were in-patients, and 6977 out-patients. Of the in-patients, 1936 were discharged cured ; 114 died—13 upon the first day, and 69 within the first week ; and 172 remained in the hospital at the end of the year.

The relative mortality in the London Hospital is low ; and this is probably in a great measure due to the open situation in which it stands. We copy a return of the number of patients admitted each year into the wards, from 1835 to 1850, both inclusive, and also the number of deaths in each year.

Date.	No. of Patients.	Deaths.	Per cent.	Date.	No. of Patients.	Deaths.	Per cent.
1835	2735	277	10	1843	3530	244	7
1836	2815	309	10·5	1844	3691	224	6
1837	2961	418	14	1845	3625	228	6·25
1838	2987	371	12·5	1846	4092	280	7
1839	3247	305	9·5[1]	1847	4159	276	6·6
1840	3339	296	9[2]	1848	4185	263	6·25
1841	3308	331	10	1849	4090	298	7·25[4]
1842	3300	260	8[3]	1850	3894	277	7

The mortality for 1850 may be thus apportioned :—

Physician's cases	127 deaths.	11·66 per cent.
Surgeon's ditto (accidents)	114 „	5 „
„ „ other cases	36 „	6 „

It hence appears, that the relative mortality among the medical cases is much greater than among the surgical cases or accidents.

The wards of the Hospital are ventilated by simple round ventilators in the ceilings, communicating with air-bricks in the walls. The windows are opened slightly at the top when necessary. There is no hot air in use ; the wards are all heated by open fire-places. Water is supplied from the East London Waterworks, by high pressure, to cisterns on the roof. Hot water is laid on throughout the house, from cisterns on roof, heated by steam from boilers in basement. There is a bath-room, with all apparatus complete, to each of the eight divisions into which the wards are classed. There are also bath-rooms for out-patients ; and a medicated bath is prepared for in or out-patients, as required.

[1] This year new sewers were completed (about August).
[2] This year the hot air was discontinued in the wards (at Christmas).
[3] This year the new wing was opened.
[4] This year the cholera prevailed.

The expenditure of the hospital is, on an average, £15,000 a-year; and, to meet this, the total fixed income is only £10,000, leaving £5,000 per annum to be made up by private subscriptions, donations, etc. In 1850, the expenditure amounted to £14,472 : 12 : 11, and the receipts to £13,522 : 6 : 5, leaving the expenditure in an excess of 950 : 6 : 6 over the income. The cost for each out-patient is about 1 : 8¾; *i. e.*, about 7½ for surgery, and 1 : 1½ for Dispensary, including brandy, wine, etc. The cost incurred for the in-patients (including the amount expended in repairs, extensions, and improvements, which, for some years past, have been necessarily very heavy), was £12,754 : 9 : 5, or £3 : 5 : 6 per head.

The pecuniary resources of the London Hospital have fluctuated greatly at different periods, and its utility has thereby been much limited. In 1807, the available income having been reduced to £2,840, and the patients to 130, an appeal was successfully made to the benevolence of the public. In 1814, a second appeal enabled the governors to complete the west wing, and receive an additional number of patients. The centenary festival, in 1840, presented an appropriate occasion for another appeal, which was very successful. The extension of the east wing was completed in 1842; but even now the income is insufficient to enable the committee to extend the benefits of the building. During 1850, 196 applicants, certified as proper cases for admission, were rejected from this reason.

Besides special arrangements for Jewish patients,—a large number of the subscribers belonging to the Hebrew persuasion,—there are, in connexion with the Hospital, a Samaritan Society and a Medical School.

The Samaritan Society was established in 1791, at the suggestion of the late Sir William Blizard. The objects of this benevolent institution are well expressed in a document appended to the last report of the hospital, the substance of which we now give.

Domestic servants, mechanics, and labourers, are often obliged to quit their places to go into the Hospital; and, when discharged convalescent, are often without a friend or home. For the relief of these—and especially of young females—this Society affords its aid. Many, who have expended all their money, or even pawned their clothes, previous to admission, in order to support themselves and obtain medical assistance, are, under such circumstances, aided by the Samaritan Society; relief is also occasionally afforded to the families of patients living at a distance. For those patients from a distance who, on their recovery, have not the means of returning home, applications are made to societies instituted for the express purpose, or places are taken, and the fares paid, by such conveyances, as are most suitable to their different stations in life. Beds are regularly engaged at the Margate Sea-Bathing Infirmary, for such as require the benefits of that institution; and, where necessary, mechanical apparatus are afforded to those who have undergone operations, or have been the subjects of partial loss of sight, or of rupture from sudden causes. Patients who are destitute of sufficient clothing are relieved. For servants whose conduct has been good while in the hospital, exertions are made to procure situations; and a great number of sailors and labourers have employment procured them, by letters addressed to captains of ships, dock-masters, and others, who have work at their disposal. Extra-diet and other comforts, such as no medical institution can with propriety or convenience afford, are occasionally administered. Many also of the out-patients, as well as the families of those within, are visited and relieved.

In 1822, a library for the use of the in-patients was commenced, at the Society's expense, by the purchase of between 300 and 400 volumes; and has since been increased to nearly 600 volumes, consisting of works of piety and religious instruction, biography, natural and general history, and select works of useful and interesting information.

The Samaritan Society possesses about £15,000 funded property. The following is a general account of the relief afforded by it from 1st March 1850, to 28th February 1851.

442 Patients relieved with money, or by having various necessary expenses paid	£363 : 10 : 0½
Clothing supplied	4 : 0 : 9
Mechanical aids	42 : 16 : 5
	£410 : 7 : 2½

Medical Instruction. The lecture building is situated at the east end of the hospital, and consists of a theatre, an anatomical and pathological museum, chemical lecture room, and dissecting room. There are teachers of all the ordinary branches of medical science. The anatomical museum is open to the students daily from 11 A.M. to 2 P.M.

Clinical instruction is given by the physicians and surgeons, and consists chiefly of short observations on the cases at the bedside, and occasional lectures on cases of interest and importance.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

Purulent Ophthalmia of Newborn Children. (Reported by James Cummin Toshach, Esq., M.R.C.S.)

No one can witness the practice of this great Ophthalmic Hospital, without being painfully struck with the lamentably frequent loss of sight from purulent ophthalmia in newborn children,—a disease entirely within the control of very simple remedies, if early applied. It may be useful to call attention to this disease, and its appropriate treatment, because instances are frequent, in which medical men overlook its early stages, or fail to employ the suitable measures of relief. The patients are peculiarly attractive of pity, from their tender age, their utter helplessness and unconsciousness, and the terrible consequences to which ignorance or neglect exposes them. Were the community, and the members of our profession, aware how large a proportion of blind persons owe their calamity to this very tractable inflammation, greater efforts, we imagine, would be made to inform and tutor the parish midwives, or other attendants on the very poor, to be on the watch for its first approach, in the children of women suffering from vaginal discharges, and to adopt without delay the requisite precautions to cut it short or subdue it.

Commencing usually on the third day after birth, and attaining its height at periods varying from the seventh or eighth day to three weeks, it affords ample time to interpose the necessary relief. But this precious interval is too often allowed to elapse without anything being done, beyond the most imperfect cleansing, the application of warm water, or that popular remedy—the mother's milk—while enormous quantities of creamy pus are accumulating behind the lids, which are spasmodically closed upon the eye, and keep it bathed and pressed upon by the morbid secretion. No doubt, the original intensity of the disease varies much, either from differences in the constitutional strength of the infant, or more probably and more often from difference in the strength of the virus, to which, we believe in common with most writers, this inflammation may be traced. But in numerous cases, the delay of which we speak is more than sufficient to establish beyond recall those destructive changes in the texture of the cornea, and possibly of deeper parts, which entail certain and irreparable blindness. And how truly painful is the task then imposed upon the surgeon, to announce to the nurse, or perhaps the mother of the little sufferer, that already the time has passed when the eye might have been saved; that they have sought relief too late, and that the child is consigned to a life of darkness.

To show that we are not exaggerating the importance of this subject to the community, we shall here subjoin a table, shewing at a glance the chief particulars of some cases of purulent ophthalmia that presented themselves in the practice of Mr. Bowman in the course of one year. These cases are selected in consequence of their shewing the results of neglect or bad treatment; many others applying early, and treated in the way presently to be mentioned, escaped with perfect sight. The number of cases of purulent ophthalmia of children treated annually at this Hospital is over 200.

Duration of Disease.	Treatment previously pursued.	Condition of Eye when brought.	Result.
A. 11 days.	Nothing done.	Right cornea sloughing.	Partial leucoma, anterior synechia, strabismus commencing.
B. 3 mths.	Warm water and mother's milk.	Both leucomatous, with tendency to staphyloma.	Staphyloma of whole of right, universal leucoma of left, not bulging.
C. 3 weeks.	Warm water, astringent dps.	Right cornea clear; left given way from a slough	Staphyloma of left followed, but subsided without operation. Leucoma is now flat, and globe half shrunk.
D. 10 days.	Warm water. Lard at night.	Right cornea sloughed; left clear.	Right eye lost, left cornea clear.
E. 1 mth.	Milk and water. Poultice.	Both corneæ sloughing; both upper lids everted	Left cornea leucomatous, right nebulous, lids righted.
F. 1 year.	Solid arg. nit. several times applied for first week.	Staphyloma of both, especially of left.	
G. 3 weeks.	Warm water.	Both corneæ partially sloughed; left worst.	Synechia anterior with leucoma in both; in right are three minute opaque white dots on the anterior surface of the lens, one of which is central. The left pupil is small, much of pupillary border being adherent to the leucoma.
H. 1 year.	Nothing done for a fortnight.	Staphyloma of right; left cornea destroyed; and front of globe flat.	
K. 5 weeks.	No treatment.	A puny child; difficult to ascertain the state of the cornea.	Died in convulsions.
L. 6 weeks.	Drops from a druggist.	Right cornea nebulous.	
M. 7 weeks.	Born in workhouse. Drops used twice a day.	Central leucoma of the right cornea.	

The treatment which is pursued at the Royal London Ophthalmic Hospital, in these cases, is simple and effectual. It consists, in general, of nothing more than the frequent injection over the front of the eyes, between the lids, of a solution of alum (alum gr. iv, water ʒi), and then anointing the lids with lard, to prevent adhesion. If the inflammation is very severe and recent, the first syringing is with a solution of nitrate of silver (gr. iv to ʒi, never stronger), and afterwards with the alum; the latter being thrown over the conjunctiva so as thoroughly to cleanse it, every half hour, every hour, or every two hours, according to the intensity of the inflammation, and the rapidity with which the purulent secretion is renewed. After

each syringing, the lard is applied, so that the lids may not agglutinate in sleep. No leeches, blisters, or other auxiliary means are used; nor is the solid nitrate of silver, or strong ointments of it, ever employed. Leeches, though sanctioned by even so judicious an authority as Dr. Mackenzie, are deemed unnecessary; and they are certainly hazardous at this tender age, and in this situation, especially among the poor, treated as out-patients. And the astringent solution, of moderate strength, is considered at least equally efficacious with the solid caustic, while it gains more uniform access to all parts of the inflamed membrane, and it is a safer and less painful remedy.

The effect of this treatment is soon apparent, in a decided diminution of the discharge, and its more gleety nature, in lessened vascularity and intolerance and spasm, as well as in the altered temper of the infant. A few days are generally sufficient to produce these results, and the subsequent progress is steadily onwards to recovery. And the advantage of it is, that it is equally applicable in all periods of the inflammation characterised by purulent discharge. If used early, it saves the eye; if delayed till the cornea has suppurated or ulcerated, or the iris or lens protruded, it has the salutary effect of arresting the disorder, and preventing further destruction. And a very great advantage indeed is this—one perhaps hardly predicable of any other remedy in any other disease—at least to the same extent. The simplicity of the treatment, and its general appropriateness to all forms and stages of the disease, should serve to give it currency among those little conversant with eye diseases; and may even sanction its use by the parish midwives as a nurse's remedy; of course only where the aid of a regularly educated medical man cannot well be had.

It may not be out of place to indicate the best means of performing this little operation of syringing within the lids—an operation easily performed badly; and, if badly, as well not done at all. The infant is laid on its back, the head on one side, the cap off, the clothes thrown off the neck, so as to escape being drenched. The head being held between the knees, the lids are gently opened by separating the finger and thumb placed on each, and resting on the margin of the orbit, so as not to compress the globe; and the fluid is then thrown in different directions between them, so as to wash the whole inner surfaces, and clear out the pus. It is well to use a four ounce syringe, which can be worked with one hand. The nozzle should be rounded, and its bore very fine. A single charge of the instrument is then sufficient for the entire operation, and the whole is performed with celerity, effect, and safety.

It must not be inferred, because no mention is made of them, that medicines are not administered internally. Particular attention is always given to the state of the bowels, to the constitution and habit of body; and such remedies as seem to be appropriate are prescribed.

GUY'S HOSPITAL.

[COMMUNICATED BY DR. GROWSE, M.B.LOND.]

The OBSTETRIC DEPARTMENT of Guy's Hospital, under the immediate superintendance of Drs. Lever and Oldham, comprises two distinct portions:—1st. That which provides for the efficient attendance of Lying-in Women; and 2ndly. That which relates to the Treatment of Diseases of the Womb and its Appendages.

The Lying-in Charity, established in the year 1833 by Mr. Harrison, the late Treasurer of the Hospital, has since that time undergone many and highly important alterations in its organisation, and has lately been brought to such a condition, that, while it provides the most efficient attendance upon those women who choose to avail themselves of its services, it, at the same time, affords to the student the largest opportunities of acquiring a thorough

knowledge of the art and science of obstetrics. He is endowed with just so much responsibility, as may enable him to feel that amount of interest which is essential to the competent fulfilment of his duties.

Such persons as live within a convenient distance from the hospital, and who are, from their position in life, entitled to the benefits of the charity, are provided with attendance and medicines, at their own houses, during the puerperal state; and a limited number, upon the recommendation of the attendant, are allowed such necessaries of diet as may be considered requisite to further their convalescence. Moreover, as the poverty of some disables them from procuring that amount of linen, which is essential to cleanliness and comfort, the charity affords them the loan of a sufficient quantity, upon the recommendation of any respectable householder.

All persons are requested to make their applications for attendance, at the office of the charity, between the hours of 10 A.M and 12 A.M., on any day, with the exception of Sunday, Tuesday, and Saturday. Their names are then entered in books provided for that purpose, and a registry is at the same time made, of the place of residence of each, her present age, and that at which she married; the number of children she has had, their respective sexes, and whether born dead or otherwise; the number of miscarriages, or abortions to which she has been subject; her country, complexion, and the character of her previous labours. A card is then given her, containing her name and address, which she is desired to send to the charity upon the supervention of labour, when she will be provided with immediate attendance.

The scholastic staff of the charity, under the surveillance of the Obstetric Physicians, consists of three resident obstetric clerks, who are appointed by the Treasurer, upon the recommendation of the Physicians, and a further corps of gentlemen anxious to attend upon cases. The former are provided with rooms and commons, and are chosen from those students who have, during their pupilage, evinced the greatest regularity in their attendance upon lectures, who have devoted themselves with the greatest diligence to the opportunities afforded them of acquiring a practical knowledge of this branch of their profession, and who have attained the largest amount of general proficiency.

The Senior Clerk holds office for the space of one month. He must be a member of the College of Surgeons, or a licentiate of the Apothecaries' Company, and must have filled the office of Second Clerk. It is his duty to provide a competent assistant staff, and to see that every person, who demands the services of the charity, has efficient and speedy attendance. He is, moreover, expected to hold himself ever in readiness to attend any call for assistance, real or imaginary, which may be made upon him; and with the sanction, or in the presence of the Obstetric Physician, he is permitted to use such means, instrumental or otherwise, as may be deemed necessary for the furtherance or completion of labour. In addition, he is responsible for the due entry of all cards and certificates in their proper books; and, at the expiration of his month of office, is expected to render to the Treasurer and Physicians an account of the proceedings of the charity during that period.

The Second Clerk holds office also for one month. He must be a member of the College of Surgeons, or a licentiate of the Apothecaries' Company, and must have filled the office of Junior Clerk, or be especially recommended. It is his province to render his assistance, upon application, in all cases, real or otherwise, of disease, or tardy convalescence supervening upon delivery; to see that all proper cases are reported, and to enter the certificates of attendance, with any remarks upon the nature or complications of the labour, which may be made by the attendant. Should the Senior Clerk be pre-engaged, he is expected to discharge his duties; and at the expiration of his month of office, is established by the Treasurer, upon the recommendation of the Physicians, as Senior Clerk.

The Junior Clerk is in residence for a fortnight. It is his duty to attend all cases that occur during the night; and, during the absence or pressing engagement of any gentleman on duty during the day, to undertake the management of those cases which would otherwise have fallen to his share.

The Assistant-Staff consists of a corps of students, eight in number, each of whom undertakes to attend all cases which may occur in any stated two hours between 6 A.M. and 10 P.M.; in addition, there are several gentlemen who enter their names at the office, for the purpose of undertaking the management of casual cases occurring during the night or day in the absence of the junior clerk or gentleman on duty.

Since the formation of the charity, the number of women who have been attended by the students attached to the hospital has continued steadily and progressively to increase. Thus, during the first seven years after its establishment, 4666 were attended; during the second seven years, 6008; and from Oct. 1847 to Oct. 1850, no less than 4055 poor women availed themselves of the benefits of this institution; and, inasmuch as in almost every month more women enter their names than are attended during the same period, there is a certainty of much further enlargement.

For the treatment of such diseases as are peculiarly incidental to women, two wards are set apart, each containing ten beds. Into these, patients may be admitted, when a vacancy occurs, every Wednesday, at 10 o'clock A.M., on their making application at the Hospital; such cases having the preference as shall be found upon examination to be the most severe, and at the same time amenable to treatment.

Each obstetric physician has his separate ward, and is assisted in his duties by a clerk, who is chosen from such of the students as shall appear to the physician to be the most deserving, and whose character will bear the strictest investigation. It is his province to accompany the physician when he visits the ward, and assist him in his examinations, whether manual or otherwise, either of the in or out-patients; and in his absence, to prescribe such remedies as may be necessary for the amelioration of urgent symptoms. He is, moreover, required to see that any application which may be thought requisite is delicately and properly made, and to keep a correct report of all cases which are admitted during his month of office.

Drs. Lever and Oldham attend every Saturday morning at the hospital, for the purpose of seeing and prescribing for out-patients. The latter begins his duties at 10 A.M., and the former two hours later. A limited number of letters (twenty) are allowed to each physician, and these are distributed to those patients whose cases appear the most to require treatment. Every letter is presentable four times, unless the patient shall have failed twice in her attendance, when the letter will be taken from her, and she will be considered as a defaulter, and have to run the same risk with others in procuring a fresh one. Upon each of the letters, the name of the physician under whose care the patient may be, is printed, and a registry is kept upon it of the date of attendance, with the name, age, residence, and occupation of the woman or her husband; a card is at the same time given her, bearing the number she holds among the out-patients, and this she is required to present at each separate attendance.

Amongst the cases which present themselves, the diseases, and the modes of treatment of each class under its peculiar conditions, are too various, and would take up too much space to be included in this short report.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 25, 1851.

Dr. Addison, President, in the Chair.

Case of Small-pox occurring a Third Time after Vaccination, and proving Fatal. By John Webster, M.D., F.R.S. Three well-marked examples of the recurrence of small-pox, met with in the same family, were related, one of which terminated fatally. The case especially referred to by Dr. Webster was that of H. N. N., who had been vaccinated satisfactorily in 1827, when three months old. Notwithstanding this circumstance, he was attacked by small-pox in 1833, along with an elder brother, who had been likewise vaccinated. Both patients recovered. In 1838 the two lads were again attacked by variola, along with a third brother, likewise regularly vaccinated. All three got quite well in due time. Subsequently, Mr. H. N. N. went to India in the Company's service, where he was seized, in April 1850, with the usual and well-marked symptoms of small-pox, which soon became confluent, and proved fatal at Dharwarinth, on the 13th of that month; this making the third time this gentleman had been attacked by variola, although previously vaccinated.

Case of Confluent Small-pox after a Third Vaccination. By Dr. A. P. Stewart. Case. A gentleman, 25 years of age, who had been five years apprenticed to a gentleman in extensive general practice in Devonshire, had been most successfully vaccinated when six months old. Requiring to attend variolous cases, he had the operation repeated in July 1849, without effect, and again in May 1850, with much irritation, inflammation, and swelling of the arm, the lymph from the vesicle not communicating the disease. He came to London to begin his medical studies on the 13th of October last, having been exposed to infection the same morning. The train of premonitory symptoms set in on the 15th, and was followed (on the 17th) by the appearance of a closely-packed eruption of papulæ all over the body. For four successive nights, mild delirium was present; but the sore-throat and conjunctivitis, occasioned by the presence of vesicles, were quickly relieved by the application of a solution of nitrate of silver; and the pulse, previously as high as 120, never rose above 100 after the seventh day. The vesicles, though very numerous on the hands and feet, caused little or no pain; on the eleventh day of disease, and the seventh of eruption, they were at their height; and, in the course of the next two days, had nearly all dried up and scaled off, with very trifling discharge. Convalescence went on rapidly.

Dr. Stewart referred to the prejudice which existed in many parts of England against vaccination, and the extent to which inoculation for small-pox, in spite of the law, prevailed. The conclusion drawn was, that vaccination offered more protection against secondary small-pox than did inoculation, for the mortality was much less in those persons who had been vaccinated than in those who had been inoculated.

Dr. Mayo spoke of an epidemic small-pox at Edinburgh some years since, in which the disease was confluent, and more fatal among the inoculated than among the vaccinated, the difference in favour of the latter being remarkable. Cases of small-pox after vaccination did not lessen the value of that operation. In three cases of supposed measles, at the Middlesex Hospital, the exanthem proved to be secondary small-pox; and he believed that many cases, reported to be second attacks of measles, were really not such.

Dr. Gregory observed, that in the first case, the fatal attack of small-pox occurred in India, where the intense heat rendered that disease especially dangerous. In Dr. Stewart's case, revaccination had been tried, and had caused great inflammation; nevertheless, the patient was again attacked with small-pox, showing the little use there is in revaccination. He had long been of that opinion. Inoculation gives the disease, small-pox; and, although some may be attacked again, it is generally protective for life. Vaccination protects up to puberty; but after that a change takes place, and the individuals become liable to small-pox. In 1815, when those first vaccinated in infancy attained the period of puberty, modified small-pox was first heard of, and it has since continued to occur. Such cases are continually admitted into the Small-pox Hospital, and their mortality has been found to be five per cent. He did not consider the cicatrices a good test of perfect vaccination. When they were complete, they were satisfactory; but their imperfect condition would not imply equal imperfection in the operation, as that might be the result of subsequent local inflammation, the constitution being still protected. Vaccination, however, should not be discouraged, because it served to protect one-half the population, statistics showing that one-half of those born die before puberty.

Dr. Webster was of opinion, that in many cases where small-pox occurred after vaccination, that operation had been imperfectly practised. In his case, it was remarkable, that the second attack of the disease involved several members of the same family, but the sons only; the daughter escaped. It would seem as if certain families could not be protected; and a case mentioned by Dr. Macintyre would appear to confirm this opinion. Two young men, both vaccinated, went abroad. The one in India caught the disease, and died. The other, in South America, although he had been vaccinated and inoculated, hearing of his brother's death, was revaccinated; still he got small-pox, and nearly died.

Dr. Copland believed that vaccination was only a temporary protection, and that, as the person became older, its influence wore away.

Anniversary Meeting, March 1, 1851.

Dr. Addison, President, in the Chair.

It appeared from the Treasurer's report that the Society had exceeded its receipts during the past year by £308:7:10, the receipts being £1809:9:7, the expenditure £2117:17:5. After the special business of the day, the election of officers, etc., had been transacted, Dr. Addison delivered the Annual Address, in the course of which he feelingly alluded to those members who were lost to the Society by death during the preceding twelvemonth,—Dr. Prout, Dr. Haviland, Mr. Crosse, Mr. Malyn, Mr. Safford Lee, and Mr. Joseph Freeman. He read also a brief sketch of each of these gentlemen; that of Dr. Prout having been written by Dr. Golding Bird; of Dr. Haviland by Dr. Paris; of Mr. Safford Lee by Mr. Quain; and of Mr. Joseph Freeman by Mr. Green.

The following gentlemen were elected Office-bearers for the ensuing year. President. Joseph Hodgson, Esq., F.R.S. Vice-Presidents. Thomas Mayo, M.D., F.R.S.; John Thomson, M.D.; William Coulson, Esq.; Alexander Shaw, Esq. Treasurers. Robert B. Todd, M.D., F.R.S.; Richard Quain, F.R.S. Secretaries. Seth Thompson, M.D.; Campbell De Morgan, Esq. Librarians. Henry Pitman, M.D.; James Dixon, Esq. Other Members of Council. George Cursham, M.D.; Sir James Eyre, M.D.; William Macintyre, M.D.; William Merriman, M.D; Alexander Sutherland, M.D., F.R.S.; James Clayton, Esq.; Henry Charles Johnson, Esq.; Henry Hancock, Esq.; John Hilton, Esq., F.R.S.; Andrew M. M'Whinnie, Esq.

Tuesday, March 11, 1851.

Joseph Hodgson, Esq., F.R.S., President, in the Chair.

Compression of the Fœtal Head during Birth. By T. Ogier Ward, M.D. The following were the main propositions. 1. Under all circumstances, almost without exception, the head of the child undergoes a change of shape during birth, from which it recovers in the great majority of instances immediately, from the elasticity of the bones, or from the effects of the first cries in producing determination of blood to the head. 2. In some cases, the head retains its compressed shape for an indefinite period, during which the child is apt to suffer from attacks of flatulence, convulsions, paralysis, and other cerebral affections. 3. There is reason to believe that idiocy and insanity may also be produced by this deformity of the skull, and the consequent compression of the brain, when it is not removed during childhood. 4. The most efficacious means of relieving the brain from this pressure is to excite the cry of the child after birth, and thus, by causing distension of the cerebral vessels, to promote expansion of the cranial bones. Thirteen cases were adduced in support of these propositions, of which four were cases of convulsions, one of symptoms of insanity, one of paralysis, that ceased when the head regained its form—and all suffered more than usual from flatulence. In two of the four cases of convulsions, the fits came on several weeks after birth, and were immediately followed by the restoration of the head to its normal shape.

Case of Chylo-Serous Urine. By J. Pearce, M.D., H.E.I.C.S. With an Analysis of the Urine. By J. E. Mayer, Esq., Madras Medical Service. Case. A woman, born in India of English parents, twenty-two years of age, the mother of three healthy children, had been nursing the youngest for ten months, when first seen by the author in March 1850. For the last five months the urine had been pale and milky, sometimes forming a jelly on cooling: the quantity had been rather large. The same state had been observed after her other confinements, and had ceased after weaning. On this occasion, she was recommended to wean the child when she first applied for advice. She declined, however, and was put on a course of tonics, with a generous diet. This plan was continued for two months, having been interrupted for a few days by a feverish attack. At the end of this time, no improvement having taken place, the patient removed to Bangalore, and came under the observation of the author. The quantity of the urine was at this time moderate; it was milky, formed a jelly when cool, and coagulated on the addition of nitric acid. The child was now weaned, the tonic plan of treatment continued, and in about three months the patient returned to her family, considering herself well. The urine was less milky, and did not coagulate on the addition of nitric acid, but still formed a jelly on being allowed to stand for some time without being agitated. The analysis, by Mr. Mayer, shewed that no casein, pus, or phosphates, were present, but that it contained albumen and an excess of fat; from which he inferred, that it is "to the presence of animal fat and albumen", that the milky appearance of the urine is attributable.

Tuesday, March 25, 1851.

Joseph Hodgson, Esq., F.R.S., President, in the Chair.

Necrosis of Bones of Cranium: removal of Large Portions. By John Drummond, Esq. Case. In 1845, a seaman belonging to H.M.S. *Mutine*, fell down some stone steps at Sierra Leone, receiving a contused wound of the scalp, for which he was admitted into the Royal Naval Hospital at Plymouth, in October of the same year. The bone, which had not been supposed to be injured, was found denuded of its pericranium to some extent, on the left side of the occipital region. After an attack of erysi-

pelas, followed by numerous purulent deposits under the scalp, necrosis went on rapidly; there was oozing of pus from beneath the diseased bones, and gaping of the coronal and sagittal sutures, the brain pulsating very distinctly in the spaces. In July 1846, he was removed to the Melville Hospital at Chatham. During the six years he has been under observation, there have been repeated attacks of erysipelas, followed by profuse suppuration. Both tables of the skull have suffered in some places; in others only the external. About five square inches have been lost from the frontal and right parietal bones, and from the squamous portion of the right temporal. The whole of the occipital bone, to within an inch of the foramen magnum, is deficient, except about two inches in the centre, which are in process of separation. On the left side, there has been less destruction of the bones; but extensive caries is going on there, and fœtid pus is discharged from several openings. At no point does there appear to have been any tendency to reproduction of bone or arrest of the disease.

Dr. Webster related the case of a suicidal lunatic in Bethlem Hospital, who, in the year 1833, one day laid his head upon an open fire, then burning briskly. The hairy scalp and integuments were much injured; serious symptoms ensued, but life was saved, although the entire skull-cap exfoliated some months afterwards. He lived till September 1841; and at his death suffered from a hernia cerebri, the size of a hen's-egg, consisting principally of the posterior part of the left lobe. At the *post-mortem* examination, the vacuum, where the skull had exfoliated, was found filled up by a thick, dense, tough, and very firm structure, in which the dura mater and external cicatrix were inseparably blended. Dr. Webster also alluded to the remarkable case lately recorded in the *American Journal of the Medical Sciences*, in which recovery took place after an iron bar had been driven through the head.[1]

Mr. Shaw exhibited two specimens of extensive loss of the entire thickness of the calvarium, to show that the vacant spaces had been filled up in great measure by newly formed bone. One had been produced by scrofulous lupus twenty years before death, in a man fifty years old. No cerebral symptoms occurred till shortly before death, when he had hemiplegia from ramollissement of the right hemisphere of the brain near the corpus striatum. In the second case, the patient, a man about sixty years old, said that he had had a severe fracture of the skull forty-five years before, and that many large pieces had been removed by the surgeon.

Mr. Hodgson said, that in necrosis of the bones of the skull, there was only a slight deposit of bony matter. When a large portion of the skull was removed, the opening was filled up by fibro-cartilage, with a small portion of osseous matter in parts of it.

Treatment of Anasarca by Puncturing the Legs. By John Hilton, Esq., F.R.S. Experience had convinced the author of the great relief which anasarcous patients receive, when the fluid is allowed to escape through artificial openings; and that, when the operation is carefully performed, it is not usually followed by unfavourable results. The instrument recommended to be employed was a very narrow, sharp-pointed lancet. Two, or sometimes four punctures, should be made by it on the outer side of the thigh, by passing it obliquely through the subcutaneous areolar tissue, so as to reach, but not wound, the fascia covering the muscles. The limb or limbs should be wrapped separately in warm blankets, which should be often renewed, to prevent the limb from becoming cold or chilled. To prevent excoriation, when there was reason to apprehend this, capillary conductors should be used, in the form of worsted threads laid over the punctures, and passing into proper receptacles. By these means, the author believed that

[1] See London Journal of Medicine, September 1850, p. 893.

the external veins were allowed to become distended with blood, so as to relieve visceral congestion, and prevent effusion into the serous membranes.

Dr. C. J. B. Williams agreed with the author as to the advantages to be derived from puncturing the legs in anasarca. He thought, however, that the punctures afforded relief, not merely by getting rid of the superfluous serum, but by purifying the blood of those materials—especially urea—which were not removed by the excretory organs.

Fracture and Distortion of the Pelvis, with an unusual Form of Dislocation of the Femur. By Charles H. Moore, Esq. Case. J. F. H., a stone-sawyer, had been crushed, several years before death, beneath a piece of timber. At the age of sixty, he died of disease of the heart and kidneys, under the care of Dr. Seth Thompson, in the Middlesex Hospital. In addition to the immediately fatal disease, the bones were found thickened, heavy, course, rugged, and porous; the intervertebral substance was composed of alternations of calcareous matter and soft cartilage; the arteries almost everywhere, and the valves of the heart, were covered with calcareous matter. The left os innominatum was broken across the acetabulum, the right just in front of it; the ischio-pubal ramus was broken on each side. None of the fractures had united, though there were considerable portions of callus. The left bone remained in three fragments, corresponding almost precisely with its original segments; the right was broken in two. The head of the left femur had been driven between the fragments of the os innominatum into the pelvis, and lay only half an inch below the promontory of the sacrum. Its trochanter fitted into a shallow excavation on the outside of the ilium, and the joint was constituted by the thin edge of the ilium and the top of the shaft of the femur, close to the trochanter. A partial new socket had been formed by the expanded ends of the pubes and ischium. The body of the left ischium was displaced considerably inwards; but no material change had taken place subsequently to the injury, in the bones on that side of the pelvis. On the right side, the hip-joint was sound; and the shaft of the right femur was removed further from the centre of gravity than the left, by the whole length of its head and neck. Hence the spine had become curved forward and to the right in the lumbar and upper sacral regions; whilst the acetabulum, unsupported in front because of the ununited fractures of the pubes, had become elevated towards the depressed spine and promontory. The ilium had, partly from pressure, and partly from some softness, become bent above the sacro-sciatic notch; and the lateral mass of the sacrum had lost three-fourths of an inch of its natural breadth. The inlet, cavity, outlet, and sacro-sciatic notch on the right side were much narrowed, and the promontory of the sacrum was only one inch and a quarter distant from the pelvic surface of the right acetabulum. The ischium was pressed inwards and upwards, and encroached on the pelvis and the perinæum, and the symphysis pubis was thrust to the left of the mesial line.

Tuesday, April 8, 1851.

Joseph Hodgson, Esq., F.R.S., President, in the Chair.

Relation of Sleep to Convulsive Affections. By W. F. Barlow, Esq. After noticing the frequent occurrence of convulsive affections during sleep, Mr. Barlow treated of the direct or predisposing causes of the convulsions, under the following heads. 1. The state of the circulation and respiration. 2. The condition of the motor force and muscular irritability. 3. The emotion of dreaming. 4. The withdrawal of the will. Dreaming had a very ample connexion with convulsions; and the causes of both had a most wide, though in great part indirect, relation. Great stress was laid on the withdrawal of the will. The inverse ratio of reflex movements, and of involuntary movements not reflex, to the power of volition, had not been duly applied to the solution of certain phenomena which occur during sleep.

The author referred to numerous experiments on man and the lower animals, by himself, Professor Volkmann, and Dr. Marshall Hall, which concurred to shew how often and how extremely a quiescent will tended to produce spasmodic affections. In convulsions, when the person was awake, there was not merely an evident, and sometimes successful, striving of the will. The author concluded by referring to certain motor local nervous affections—paralysis agitans, mercurial erethism, and chorea, which were wonderfully under the sway of slumber.

MEDICAL SOCIETY OF LONDON.

February 22, 1851.

J. Risdon Bennett, M.D., President, in the Chair.

Diarrhœa as a hitherto unnoticed [?] Symptom of Menstruation: Use of Purgatives in the different Menstrual Epochs. By E. J. Tilt, M.D. Catamenial diarrhœa was examined with regard to its occurrence: 1. As a prodroma of menstruation: 2. During its regular establishment: 3. At its cessation.

1. As a prodroma of menstruation, diarrhœa scarcely ever occurs. 2. As a symptom of regularly-established menstruation, it occurred in 88 out of 161 cases. In these, it preceded the menstrual flow in 45; it accompanied it in 31; both preceded and accompanied it in 10; and in two instances habitually followed, not having preceded or accompanied it. 3. As a symptom of the cessation of the catamenia, diarrhœa was noticed in only 8 per cent. of the cases examined. The diarrhœa is usually unattended with pain, but sometimes nausea and slight colics precede for one or two days. When it appears at the change of life, it generally appears at irregular intervals. Dr. Tilt believed that the ovaries not only call the uterus into action, but also the nutritive organs, especially the intestines, which are under the influence of the same ganglionic nervous system.

With regard to purgatives during fully-established menstruation, Dr. Tilt would give them in defective menstruation, not dependent on serious organic lesion. Care should be taken, however, to give them at the time when the premonitory diarrhœa ought to occur, so as not to anticipate the catamenial period. In amenorrhœa and chlorosis, Dr. Tilt used an emeto-cathartic at the initial part of the treatment, followed by steel and bitters; but if there was not improvement, he put aside the steel and bitters, and repeated the emeto-cathartic.

After the cessation of menstruation, purgatives must be given habitually, to diminish plethora. The soap and aloes pill of the Pharmacopœia, in doses of five or ten grains, at dinner, was what Dr. Tilt frequently recommended. Flour of sulphur alone, or with sesquicarbonate or biborate of soda, and ipecacuanha, might be given in milk, to act mildly on the bowels.

March 1, 1851.

J. Risdon Bennett, M.D., President, in the Chair.

Congenital Malformation of the Genito-Urinary Organs. Mr. T. H. Wakley exhibited a man suffering from malformed bladder, and stated that he proposed to try the effect of a plastic operation.

The New Superphosphate of Iron. Dr. Routh stated, in reference to the new preparation of iron he had brought before the Society on a former occasion, that it had been analysed and found to be a new salt—a superphosphate of iron dissolved in an excess of phosphoric acid. It was exceedingly pleasant to take, so that it was very well adapted for children. He believed it to be more speedy in its operation than many other preparations of iron. It had been now prepared in the form of a syrup by Mr. Greenish, of 20, New-street, Dorset-square; which is much cheaper than that of the iodide of iron.

Case of Spontaneous Collapse of the Antrum. By White Cooper, Esq. This paper appeared as an original article in the April number of this Journal.

Anniversary Meeting, March 8, 1851.

J. Risdon Bennett, M.D., President, in the Chair.

The seventy-ninth annual meeting was held at the Albion Tavern, Aldersgate-street. Dr. Rowland delivered the oration.

Election of Office-Bearers. President. E. W. Murphy, M.D. Vice-Presidents. J. F. Clarke, Esq.; F. Hird, Esq.; E. Lankester, M.D.; Forbes Winslow, M.D. Treasurer, H. Hancock, Esq. Librarian. W. A. Harrison, Esq. Secretaries in Ordinary. C. H. F. Routh, M.D.; C. Cogswell, M.D. Foreign Secretary. T. Davidson, M.D. Councillors. G. Pilcher, Esq.; E. Headland, Esq.; W. C. Dendy, Esq.; J. Middleton, Esq.; S. Stedman, Esq.; S. W. J. Merriman, M.D.; W. Smiles, M.D.; F. Sibson, M.D., F.R.S.; J. R. Bennett, M.D.; H. H. Walton, Esq.; J. Gay, Esq.; T. Nunn, Esq.; A. B. Garrod, M.D.; R. Druitt, Esq.; J. S. Bushnan, M.D.; W. Coulson, Esq.; J. W. Woodfall, M.D.; A. P. Stewart, M.D.; J. H. Bennet, M.D.; E. J. Tilt, M.D. Orator for 1852. Edwin Canton, Esq.

MISCELLANEOUS INTELLIGENCE.

Professor Kölliker. This distinguished histologist last autumn paid a scientific and recreative visit to Holland and Great Britain, in company with Dr. Czermak. From time to time, he expressed his opinions of what he saw, with regard to the subject which he particularly studies, in four letters, dated respectively from Utrecht, Leyden, Edinburgh, and London, and addressed to Dr. Von Siebold, his colleague in the editorship of the *Zeitschrift für wissenschaftlichen Zoologie*.

In Utrecht, he appears to have derived great pleasure from his examinations of the labours of Harting, Schroeder van der Kolk, and Donders; and he concludes his first letter by observing, that "Utrecht is a soil where science flourishes so vigorously, that no attempt should be made to transplant it without careful consideration". The letter from Leyden contains an account of his visit to that place and to Amsterdam.

From Holland, Drs. Kölliker and Czermak passed over to Edinburgh, and visited the Highlands, though, as the author says, not with much profit to science, especially as they had lost the opportunity of exploring the sea off the west coast in company with Forbes and Goodsir. On their return to Edinburgh, they spent ten days with Professor Goodsir, and visited the museums and schools of anatomy in that city. Of Professors Syme, Christison, and Simpson, Dr. Kölliker says:—"In the hospital, we less admired the safety than the ease and elegance with which Syme operates. The first is found in Germany; but the latter are more rare. . . . . Christison does all credit to the great name which he has in Germany; he is highly estimable as a man, and is, perhaps, next to Simpson, the most popular physician in Edinburgh. Simpson is incontestably the first obstetrician in Great Britain; he cannot have many equals, and perhaps no superior." The experiments of Dr. Simpson on parturition in swine, after removal of a portion of the spinal cord, are referred to by Dr. Kölliker, who says that, as far as they go, they show that parturition is independent of the action of the cord. In returning from a visit to the Bass Rock, the travellers were reminded, at the village of Whitechapel, twenty miles from Edinburgh, of the state of the study of anatomy in Britain, about twenty years ago, by the ponderous masses of iron trellis-work, which were used to protect the graves in the churchyard from the resurrectionists.

After a visit to Glasgow, Drs. Kölliker and Czermak proceeded to London:

and Dr. K. speaks in terms of great satisfaction of the reception which he met with from Mr. Quekett, of the Royal College of Surgeons. His collection of microscopic objects he believes to be in no way inferior to Harting's in Holland, but even to surpass it. W. Bowman, Sharpey, Todd, Wharton Jones, Carpenter, Owen, and Paget, receive each a justly deserved tribute. With regard to the Hunterian Museum, Dr. Kölliker thinks that it ought to be made much more available for instruction than it is at present. "So large an institution", he says, "should also be a large school" for anatomical instruction. The Regent's Park Zoological Gardens, the British Museum, and the Museum of Economic Geology, were each visited; and the hippopotamus is honoured with a brief notice.

Dr. Kölliker seems to have expressed his honest opinion of the state of anatomical knowledge in the places which he visited, and of the anatomists with whom he came in connexion. British *savants* and practitioners may well feel gratified and encouraged by the tribute which he pays to their industry and knowledge.

APPOINTMENTS.

Allen, Thomas, Esq., elected Assistant Medical Officer to the County Lunatic Asylum, Gloucester.

Bateman, Frederic, M.D., elected House-Surgeon to the Norfolk and Norwich Hospital.

Canton, Edwin, Esq., appointed Lecturer on Anatomy at Charing Cross Hospital, in the room of Francis Hird, Esq.

Chalmers, David, Esq., elected Honorary Assistant-Surgeon to the Northern Hospital, Liverpool.

Fletcher, E. A., Esq., Surgeon, elected Coroner of the Borough of Walsall.

Hird, Francis, Esq., appointed Lecturer on Physiology at Charing Cross Hospital, in the room of T. Wharton Jones, Esq., resigned.

Hooper, Dr. R. L., appointed Physician to the Surrey Dispensary, in the room of Dr. Birkett, resigned.

Jackson, Thomas Carr, Esq., appointed Assistant-Surgeon to the Royal Free Hospital.

Johnstone, Dr. James, Senior Physician to the General Hospital, Birmingham, appointed Joint Professor of Medicine in Queen's College.

Smith, Dr. Edward, appointed Lecturer on Botany at the Charing Cross Hospital.

Spence, Dr., appointed Assistant to the Superintendent of the Army Medical Department.

Wright, Dr. Samuel, Physician to the General Hospital, Birmingham, appointed Joint Professor of Therapeutics in Queen's College.

OBITUARY.

Smith, Henry, Esq., late of Torrington Square, at Kensington, on 18th April.

BOOKS RECEIVED.

Crosse (J. G.) Midwifery Cases. Edited by Dr. Copeman. London and Norwich: 1851. Curling on Diseases of the Rectum. London: 1851. Emeritus, Letter to Sir G. Grey on Medical Registration. London: 1851. Lever (J. C. W.) Annual Address delivered before the Hunterian Society of London. London: 1851. Prescribers' Pharmacopœia. New Edition. London: 1851. Translation of Pharmacopœia Londinensis. By a Physician. London: 1851. Tufnell (Jolliffe) on Treatment of Aneurism by Compression. Dublin: 1851. Ziegler (G. J.) Inaugural Essay on Zoo-adynamia. Philadelphia: 1850.